

Historic, Archive Document

Do not assume content reflects current
scientific knowledge, policies, or practices.

aHD9241
087
copy 2

5



United States
Department of
Agriculture

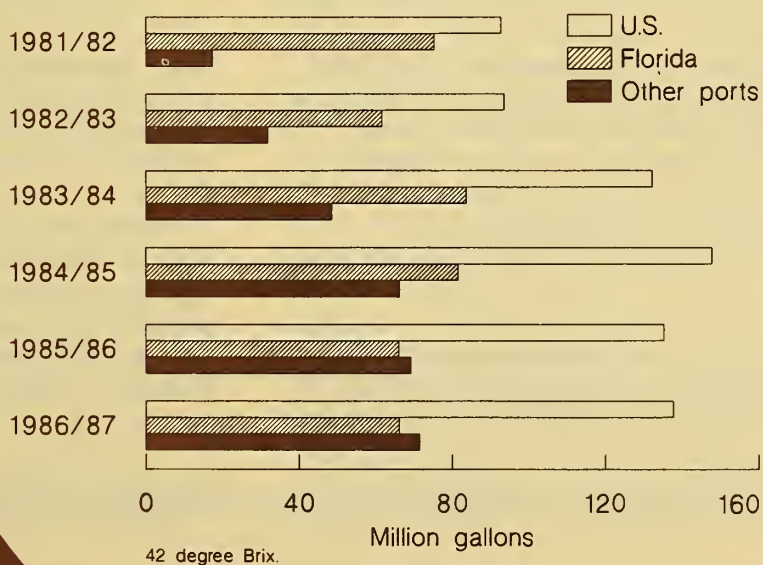
Economic
Research
Service

TFS-245
March 1988

Fruit and Tree Nuts

Situation and Outlook Report

**U.S. Imports of Frozen Concentrated
Orange Juice**



CONTENTS

Page

4	General Price Outlook
6	Citrus
13	Fresh Noncitrus
19	Processed Noncitrus
21	Berries
22	Tree Nuts
	Special Article:
26	U.S.-EC Competition in Wine Production and Marketing
44	List of Tables

Principal Contributor

Ben W. Huang (202) 786-1884

Statistical Assistant

Wynnice P. Napper (202) 786-1885

Electronic Word Processing

Cynthia M. Taylor

Commodity Economics Division, Economic Research Service
U.S. Department of Agriculture, Washington, D.C. 20005

Approved by the World Agricultural Outlook Board. Summary released March 2, 1988. The next summary of the *Fruit Situation and Outlook* is scheduled for release on August 1, 1988. Summaries and full Situation and Outlook reports, including tables, may be accessed electronically. For details, call (301) 982-6662.

The *Fruit Situation and Outlook* is published three times a year and supplemented by a yearbook. Annual subscriptions are available

from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. For ordering and pricing information, call the GPO order desk at (202) 783-3238.

Current subscribers will receive renewal notices from the Government Printing Office approximately 90 days before their subscriptions expire. Notices will be sent ONLY ONCE and should be returned promptly to ensure uninterrupted service.

SUMMARY

After declining for 2 months, the average grower price for fresh and processing fruit rose slightly in February. However, the price was fractionally below a year ago, as lower prices for apples, lemons, pears, and strawberries more than offset higher prices for grapefruit and oranges. Orange and grapefruit prices will remain firm because of expected strong demand. Seasonally increased supplies of strawberries this spring will weaken prices, and apple and pear prices will remain below a year earlier in light of large supplies. Overall, grower prices for fresh and processing fruit probably will average slightly lower this spring than a year ago.

Strong demand and seasonally reduced supplies should keep retail prices of fresh fruit above a year ago. Fresh fruit prices have been strong, averaging 4.6 percent above a year ago in January. Prices were higher for all fruits except apples and pears. Retail prices of processed fruit continued to advance in January, averaging 6.7 percent above a year ago. Higher prices for frozen concentrated orange juice (FCOJ), tight supplies of canned fruit, and strong demand for dried fruit are expected to further strengthen consumer prices of processed fruit.

As of February 1, the 1987/88 U.S. citrus crop (excluding California "other areas" grapefruit) was forecast at 12.3 million tons, up 4 percent from last season. Although Florida and Texas continue to recover from freeze damage in the early 1980's, citrus production remains sharply below the record 16.5 million tons in 1979/80. Larger crops are indicated for all citrus except lemons and tangerines. The U.S. orange crop is forecast at 194 million boxes, 6 percent above 1986/87. Larger crops are reported in Florida and Texas, while reduced production is indicated for Arizona and California. Grower prices have been well above a year earlier, reflecting smaller supplies for the fresh market and strong processor demand. Price hikes for FCOJ have also strengthened prices for Florida oranges.

Florida's FCOJ yield for 1987/88 is forecast at 1.51 gallons per box of 42.0 degree Brix, based on conditions around February 1.

This is up from the January projection of 1.48 gallons and equals last season's record. Production through mid-February was running slightly ahead of last season and the larger Florida crop is likely to result in a pack of 160-165 million gallons, compared with 145 million in 1986/87. With moderately increased carryin stocks, domestic supplies will be substantially above a year earlier. FCOJ imports (mostly from Brazil) are likely to fall from last season in anticipation of larger domestic supplies and reduced movement.

Although movement of FCOJ through mid-February was slightly ahead of last season, the pace is not likely to continue throughout 1987/88 because strong prices are likely to shift consumer demand toward lower-priced alternatives, such as apple and pineapple juice. After Brazilian exporters raised their FCOJ prices further to \$2,000 a metric ton, Florida packers also raised f.o.b. prices to a record \$5.74 a dozen 6-ounce cans. This compares with \$4.33 a year ago. Prices are expected to stay firm through the spring.

Primarily due to larger crops in Florida and Texas, the February 1 forecast for 1987/88 U.S. grapefruit production (excluding California's "other areas") is 61.7 million boxes, 6 percent above last season. Because of strong export demand, f.o.b. prices for fresh grapefruit have averaged slightly to substantially higher than a year ago, depending on varieties and areas. Prices are expected to stay firm during the balance of the season.

Lemon production in Arizona and California in 1987/88 is expected to total 23.5 million boxes, 18 percent below the previous season's utilized production. F.o.b. prices for fresh lemons were very strong early in the season, but with increased shipments, prices dropped well below a year ago in mid-February. Nevertheless, the season-average price probably will surpass last season's because of sharply reduced supplies.

Although shipments of apples and pears have been running well above a year earlier, cold storage stocks at the beginning of February were up 37 and 16 percent,

respectively, from a year ago due to large 1987 crops. Abundant supplies will keep prices lower this marketing season.

Supplies of processed noncitrus fruit will be mixed during the remainder of the 1987/88 season. Increased shipments and reduced supplies have created tight stocks of several canned products, causing canners to raise prices for some items. Prices are expected to stay firm throughout the season. Stocks of frozen fruit and berries at the beginning of February were well above a year ago, primarily reflecting significantly larger supplies of frozen peaches and strawberries. Prices for frozen fruit are likely to weaken somewhat. Supplies of dried prunes are ample, and raisin supplies are adequate. Movement of dried fruit has been strong, and prices have been firm.

Last year's production of six major tree nuts increased 57 percent from 1986 and 20 percent from 1985. Production of almonds, filberts, macadamia nuts, and walnuts increased from 1986, while pecan and pistachio harvests declined. Despite larger production, grower prices for filberts are above a year ago in response to strong demand. In contrast, pecan growers are likely to see lower prices because of sluggish movement. Larger crops of almonds and macadamia nuts have weakened grower prices, while a smaller pistachio crop has strengthened them. The value of 1987 utilized production of these edible nut crops, excluding walnuts, is estimated at \$892 million, up 14 percent from 1986 and 46 percent above 1985. The value increased for all nuts except pecans and pistachios.

GENERAL PRICE OUTLOOK

After declining for 2 months, the February index of prices received by growers for fresh and processing fruit at 172 (1977=100), was up slightly from the previous month, but down fractionally from a year ago (table 1). Prices above the previous month were indicated for apples, oranges, pears, and strawberries. But, compared with a year earlier, lower prices for apples, lemons, pears, and strawberries more than offset higher prices for oranges and grapefruit. Orange and grapefruit prices will remain firm because of expected strong demand. Seasonally increased supplies of strawberries this spring will

weaken prices. Prices of apples and pears will remain below year-earlier levels in view of large supplies. Overall, the grower price for fresh and processing fruit may average slightly lower this spring than a year ago.

Retail prices of fresh fruit have been strong, averaging 4.6 percent above a year ago in January (table 2). Prices were higher for all fruits except apples and pears which are in ample supply. Expected strong demand for citrus and seasonally reduced supplies for apples and pears should keep retail fruit prices this spring above a year ago.

Retail prices of processed fruit continued to advance in January, averaging 2.5 percent

Table 1.—Index of annual and quarterly prices received by growers for fresh and processing fruit, 1986-88

Year	Annual	1st	2nd	3rd	4th
1977=100					
1986	169	153	154	190	178
1987	181	162	174	185	201
1988	1/ 171				

1/ Two-month average.

SOURCE: Agricultural Prices, NASS, USDA.

Table 2.—Annual and quarterly Consumer Price Indexes for fresh fruit, 1986-88

Year	Annual	1st	2nd	3rd	4th
1982-1984=100					
1986	118.6	113.1	120.6	124.0	116.9
1987	132.0	128.5	137.8	132.5	129.3
1988	1/ 130.7				

1/ January's figure only.

SOURCE: Bureau of Labor Statistics, U.S. Department of Labor.

Table 3.—Citrus fruit: Production, 1985/86, 1986/87, and indicated 1987/88 1/

Crop and State	Boxes			Ton equivalent		
	Used		Indicated 1987/88	Used		Indicated 1987/88
	1985/86	1986/87		1985/86	1986/87	
	1,000 boxes 2/			1,000 short tons		
Oranges:						
Early, midseason, and navel varieties 3/:						
California	33,000	34,500	30,000	1,238	1,294	1,125
Florida	64,200	65,800	75,000	2,889	2,961	3,375
Texas	200	500	950	9	22	40
Arizona	600	950	650	23	36	24
Total	98,000	101,750	106,600	4,159	4,313	4,564
Valencias:						
California	20,900	24,000	24,000	784	900	900
Florida	55,000	53,900	60,000	2,475	2,425	2,700
Texas	110	375	600	5	16	26
Arizona	1,700	2,200	2,400	64	83	90
Total	77,710	80,475	87,000	3,328	3,424	3,716
All oranges:						
California	53,900	58,500	54,000	2,022	2,194	2,025
Florida	119,200	119,700	135,000	5,364	5,386	6,075
Texas	310	875	1,550	14	38	66
Arizona	2,300	3,150	3,050	87	119	114
Total	175,710	182,225	193,000	7,487	7,737	8,280
Grapefruit:						
Florida all	46,750	49,800	52,000	1,987	2,116	2,210
Seedless	43,600	46,900	48,500	1,853	1,993	2,061
Pink	18,000	20,000	20,500	765	850	871
White	25,600	26,900	28,000	1,088	1,143	1,190
Other	3,150	2,900	3,500	134	123	149
Texas	220	1,925	3,300	9	77	132
Arizona	2,400	2,200	2,200	77	70	70
California 4/	8,100	9,100	—	266	298	—
Desert Valleys	3,600	4,200	4,200	115	134	134
Other areas	4,500	4,900	(4)	151	164	(4)
Total	57,470	63,025	—	2,339	2,561	—
Lemons:						
California	15,100	21,500	18,500	574	817	703
Arizona	3,250	7,100	5,000	123	270	190
Total	18,350	28,600	23,500	697	1,087	893
Tangelos:						
Florida	2,950	4,000	4,300	133	180	194
Tangerines:						
Florida 5/	1,950	2,340	2,300	93	111	109
Arizona	700	700	550	26	26	21
California	1,800	2,230	1,500	68	83	56
Total	4,450	5,270	4,350	187	220	186
Temples:						
Florida	2,950	3,400	3,600	133	153	162
All citrus	261,880	286,520	6/ 291,050	10,976	11,938	6/ 12,261

1/ The crop year begins with bloom of the first year shown and ends with completion of harvest the following year. 2/ Net content of box varies. Approximated averages are as follows: Oranges—California and Arizona, 75 lbs.; Florida, 90 lbs.; Texas 85 lbs.; Grapefruit—California, Desert Valleys, and Arizona, 64 lbs.; other California areas, 67 lbs.; Florida, 85 lbs.; Texas, 80 lbs.; Lemons, 76 lbs.; Tangelos, 90 lbs.; Tangerines—California and Arizona, 75 lbs.; Florida, 95 lbs.; and Temples, 90 lbs. 3/ Navel and miscellaneous varieties in California and Arizona. Early and midseason varieties in Florida and Texas, including small quantities of tangerines in Texas. 4/ The first forecast for California grapefruit "other areas" will be as of April 1, 1988. 5/ Per program modification, Florida all tangerines includes honey tangerine beginning with 1987/88 season. Estimates for previous seasons are revised to include the honey variety. 6/ Excludes California grapefruit in "other areas."

SOURCE: Crop Production, NASS, USDA.

above the previous month and 6.7 percent above a year ago. Prices of fruit juice and frozen fruit were 7.6 percent above a year earlier, while those of canned and dried fruit were 3.4 percent higher. Retail fruit juice prices are expected to rise further as Florida packers have raised FCOJ prices several times since last fall after Brazilian exporters raised their orange juice prices. In January, the average retail price of FCOJ was \$1.59 per 16-ounce can, compared with \$1.47 a year ago. Even with adequate supplies, strong demand has kept raisin prices firm. Tight supplies will hold canned fruit prices strong, while ample supplies of small dried prunes may

weaken prices somewhat. Overall, retail prices of processed fruit will stay strong.

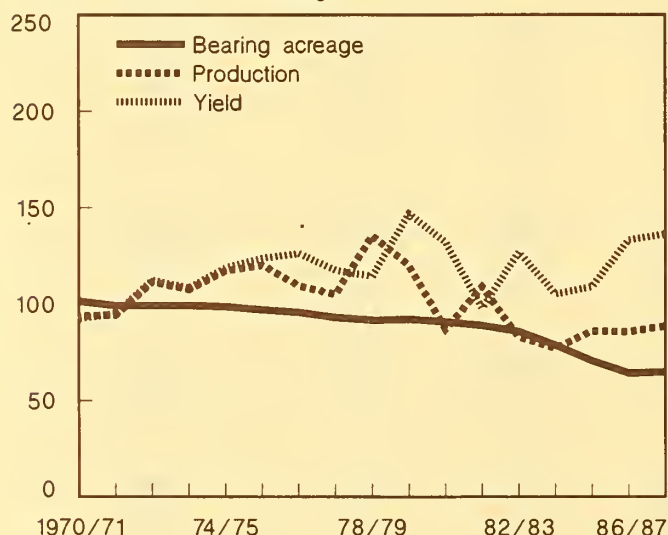
CITRUS

The February 1 forecast of the 1987/88 citrus crop (excluding California "other areas" grapefruit) is 12.3 million tons, up 1 percent from the January estimate and 4 percent higher than last season (table 3). Although Florida and Texas continue to recover from freeze damage in the early 1980's, the citrus crop is still sharply below the record production of 16.5 million tons in 1979/80. Larger crops are indicated for all citrus

Oranges: Acreage, Yield, and Production

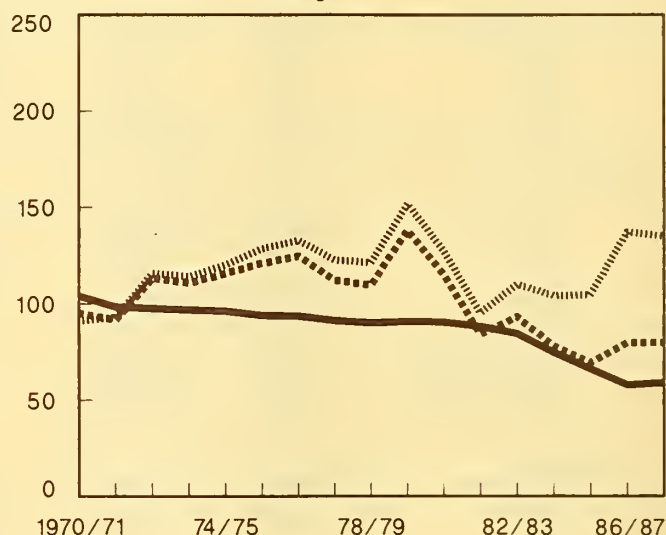
United States

% of 1970/71-1972/73 average



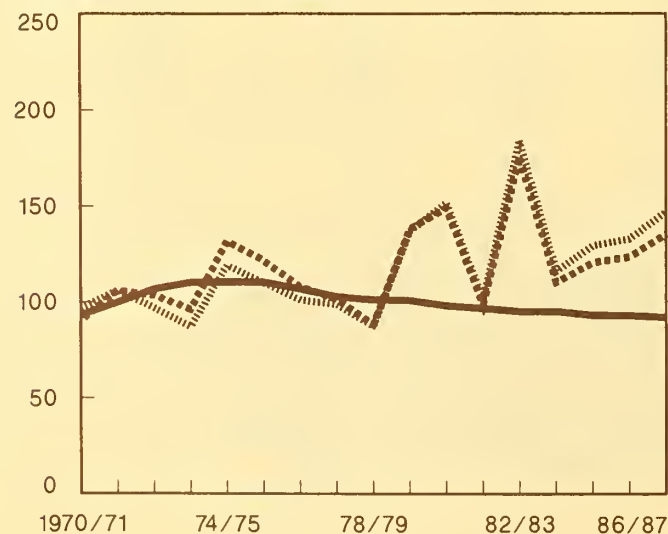
Florida

% of 1970/71-1972/73 average



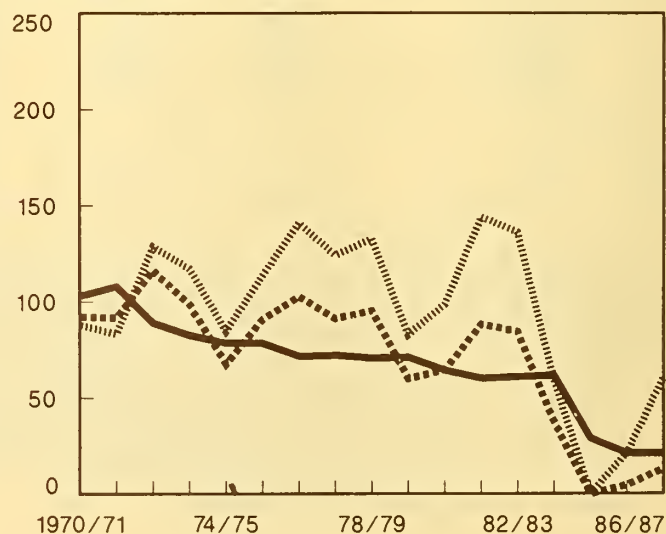
California and Arizona

% of 1970/71-1972/73 average



Texas

% of 1970/71-1972/73 average



except lemons and tangerines. Strong demand, reduced supplies, and higher prices for processing citrus products have kept prices generally firm.

Oranges

Moderately Larger Crop

As of February 1, the U.S. all orange crop was forecast at 194 million boxes for the 1987/88 season, 1 percent above the January forecast and 6 percent more than 1986/87. Florida's all orange crop is estimated at 135 million boxes, 13 percent more than 1986/87 and the highest since 1983/84. Also, the 1986/87 Florida orange bearing acreage at 375,400 rose 2 percent from a year earlier, the first increase since 1979/80. Production of early and mid-season oranges in Florida is forecast at 72 million boxes, 14 percent more than 1986/87. Florida's Valencia crop is forecast at 60 million boxes, 11 percent higher.

The California orange crop forecast, at 54 million boxes, is up 4 percent from the January estimate, but 8 percent less than last season's production. The higher crop estimate is due entirely to a 2-million-box increase in the navel orange forecast to 30 million boxes. However, this is still 13 percent below the 1986/87 navel orange harvest. The California Valencia orange forecast, at 24 million boxes, is unchanged from the January estimate and the same as the previous season's crop. As of February 1, 39 percent of California's navel crop had been harvested, but harvest had not yet begun for Valencias.

The all orange forecast for Arizona is 3.05 million boxes, the same as the January forecast but 3 percent less than last season's production. In Texas, orange production continues to recover from the December 1983 freeze. The crop is forecast at 1.55 million boxes, up 11 percent from January and sharply higher than the 875,000 boxes harvested the previous season. No commercial supplies were harvested for the 1984/85 crop.

Shipments Rise, Prices Strong

Through mid-February, shipments of Florida oranges were running moderately ahead of last season. Recently, USDA announced that it will allow citrus fruit shipments from some Florida areas to other

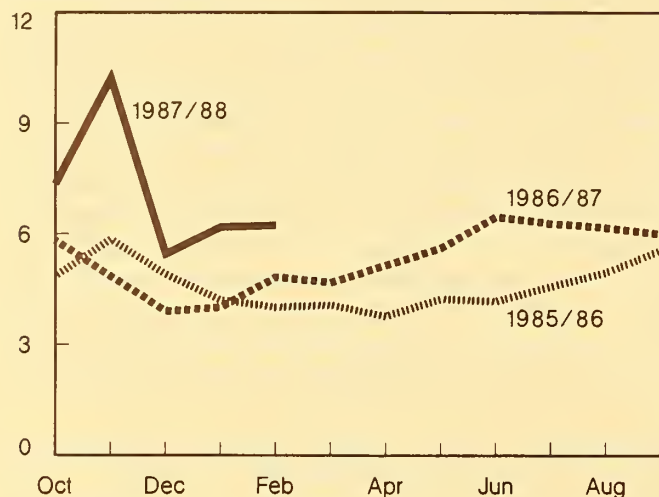
citrus producing States under certain conditions. The ruling relaxes a Florida citrus quarantine that began in 1984 because of the outbreak of citrus canker. The quarantine restricted interstate movement of citrus from Florida to other commercial citrus producing areas in the United States. Two strains of canker, Asiatic and Nursery, currently exist in Florida. Under the new procedure, citrus from areas not affected by the Asiatic strain may now be moved anywhere in the United States if the fruit is harvested from a grove that has had no infected or exposed plants or plant parts in the past 2 years, and is determined to be canker free. In addition, the fruit must be treated and waxed to remove any surface contamination. The change in the regulation will provide additional markets for some Florida citrus fruit, but the increase will be relatively small.

Because of smaller available supplies of California oranges for the fresh market and increased demand for processing oranges, f.o.b. prices for Florida fresh oranges have been strong. In mid-February, the f.o.b. price for early and mid-season oranges was quoted at \$7.05 a carton, up 25 percent from a year ago. The price hikes for FCOJ by Brazilian exporters and Florida canners have also strengthened processing orange prices. Florida's delivered-in prices for early and mid-season oranges for processing into FCOJ through mid-February this season have averaged \$7.66 a box, compared with \$5.85 a year earlier. Strong demand and high orange product prices should keep upward pressure on Florida orange prices.

Shipments of California-Arizona navel oranges to the domestic market have been moderately below year-earlier levels, while exports have been running well below last season through mid-February. With a slow-growing economy and higher prices, domestic demand for fresh oranges may remain weak. Foreign demand for U.S. fresh oranges was very strong last season and is expected to continue strong this season. Despite the expected decline in California's orange harvest, increased availability of larger oranges should boost export sales, especially to Hong Kong. Japanese orange imports will increase in line with the annual increase in the orange import quota. Japan and Hong Kong together accounted for nearly 80 percent of total U.S. exports to offshore destinations in

All Oranges: U.S. Equivalent On-Tree Returns Received by Growers

\$ per box



1986/87. Sales in Europe will benefit from the U.S.-EC citrus agreement negotiated in 1986 which provides for lower duties for 20,000 tons of oranges between February and April (table 20).

In response to increased shipments, f.o.b. prices for fresh California-Arizona navel oranges have fallen from their early season highs. By mid-February the f.o.b. price was quoted at \$6.81 a carton, compared with \$6.85 a year earlier. With the smaller crop and expected rise in export shipments, f.o.b. prices for fresh oranges are expected to stay firm. Retail prices for fresh oranges have been above a year earlier. The BLS January 1988 average retail price for fresh navel oranges

Table 4.--Oranges used for frozen concentrate, Florida, 1984/85-1987/88

Season	Orange and Temple production	Used for frozen concentrates 1/	Yield per box
	Million boxes	Percent	Gallons 2/
1984/85	107.2	86.1	80.3
1985/86	122.1	96.1	78.8
1986/87	123.1	96.2	78.1
1987/88 3/	138.6	N.A.	N.A.

1/ Includes tangelos, Temples, tangerines, and K-early citrus. 2/ Gallons per box at 42.0 degrees Brix equivalent. 3/ Preliminary. N.A. = Not available.

SOURCES: Crop Production and Citrus Fruits, NASS, USDA.

was 50.1 cents a pound, 7.2 percent above last year. Prices through the winter are expected to stay high in light of substantially smaller remaining supplies of navel oranges.

Significantly Larger FCOJ Pack Expected

As of February 1, the 1987/88 Florida yield of FCOJ is forecast at 1.51 gallons per box of 42.0 degree Brix equivalent (table 4). This is up from the January projection of 1.48 gallons, and equals last season's record high. FCOJ production through mid-February was running moderately ahead of last season and the larger Florida crop is likely to result in a total pack of 160 to 165 million gallons in 1987/88, compared with 145 million the previous season. With moderately increased carryin stocks, total domestic supplies of FCOJ this season will be more than 10 percent above 1986/87 (table 18). FCOJ imports (mostly from Brazil) are likely to fall from last season in anticipation of larger domestic supplies and reduced movement.

Product movement through mid-February has been slightly ahead of last season, but the pace is not likely to continue throughout 1987/88 because strong prices are likely to shift consumer demand to lower-priced alternatives, such as apple and pineapple juice. After Brazilian exporters raised their FCOJ prices to current levels of \$2,000 a metric ton (f.o.b. Santos) because of reduced orange production, Florida packers also raised f.o.b. prices to a record-high of \$5.74 a dozen 6-ounce cans. This compares with \$4.33 a year ago. Prices are expected to stay firm throughout the season. Because the larger pack and carryin stocks more than offset increased movement, Florida processors' FCOJ stocks available as of February 13 were slightly above a year ago.

Retail prices of FCOJ during 1987 fluctuated from \$1.48 per 16-ounce can in March to \$1.59 in December, and averaged \$1.53, compared with \$1.54 in 1986. The January 1988 average price rose 3 percent from the previous month and 8 percent from a year earlier. However, it was still below the December 1985 record of \$1.82. With the recent f.o.b. price hike, retail prices are likely to rise further.

Movement of Chilled Orange Juice Lags

Despite lagging movement, Florida packers had processed 137 million gallons of chilled orange juice (including fruit, single-strength reprocessed, and FCOJ) through February 13, up 6 percent from a year ago. Following price hikes for FCOJ, f.o.b. prices of chilled orange juice also strengthened. Higher prices reduced sales, with total product movement through February 13 down 4 percent from a year earlier. However, exports have improved somewhat from last year, probably due to the weak dollar. If chilled orange juice prices stay strong and apple juice prices remain steady, movement will remain weak throughout the season.

Canned Orange Juice Pack Down Moderately

Florida's pack of canned orange juice totaled 3.1 million cases (24/2's) through mid-February, down 8 percent from a year earlier because of larger carryin stocks and lagging movement. Lagging movement has caused stocks to rise slightly over a year ago. Nevertheless, following price hikes for FCOJ, f.o.b. prices for canned orange juice also were raised to \$13.65 a case (12/46 ounces, sweetened and unsweetened) compared with \$11 a year ago. Despite sluggish movement, prices are not expected to fall in view of strong orange prices.

Grapefruit

Production Continues To Increase

Primarily due to larger crops in Florida and Texas, the February 1 forecast for 1987/88 U.S. grapefruit production (excluding California's "other areas") is 61.7 million boxes, up fractionally from the January forecast, and 6 percent above last season. Florida's crop is forecast at 52 million boxes, up 4 percent from 1986/87 and the highest since 1980/81. The Florida harvest was about one-third finished as of February 1. The California "Desert Valley" crop forecast continues at 4.2 million boxes, unchanged from last season. The forecast for Arizona, at 2.2 million boxes, is also the same as last season. In Texas, the forecast is 3.3 million boxes, 3 percent higher than the January forecast and

up substantially from the 1.3 million boxes produced during 1986/87. In 1984/85 no commercial supplies were harvested in Texas due to the December 1983 freeze.

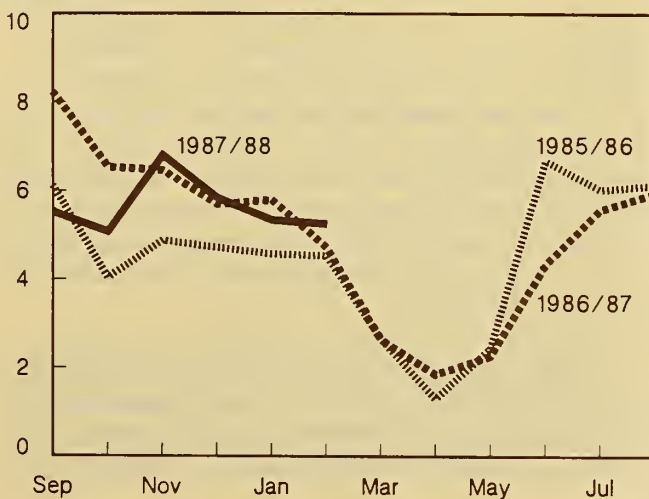
Prices Strong

The movement of grapefruit is running slightly behind last season. With the slow-growing U.S. economy and higher prices, domestic demand for fresh grapefruit has been sluggish. Nevertheless, f.o.b. prices for fresh grapefruit have been relatively high reflecting strong export demand. In mid-February, the f.o.b. price for Florida pink seedless grapefruit was quoted at \$6.40 a carton in Indian River, compared with \$6.31 a year ago. With a seasonal decrease in supplies this spring and expected strong export demand, prices are expected to stay strong throughout the season.

Export markets for fresh grapefruit have been strong. During the first 4 months of 1987/88 (September-December), offshore grapefruit exports totaled 75,776 metric tons, up 16 percent from a year ago. The gain was primarily from the EC and Pacific Rim countries. Japan, the leading customer, bought 22 percent more than a year ago. Purchases from the EC increased 14 percent, with France, the leading European customer, taking 8 percent more. The weak dollar and promotion under USDA's Targeted Export Assistance program (TEA) have contributed to increased exports. TEA funds designated for the Florida citrus industry increased from \$5.1 million in fiscal year 1987 to \$6.5 million in

All Grapefruit: U.S. Equivalent On-Tree Returns Received by Growers

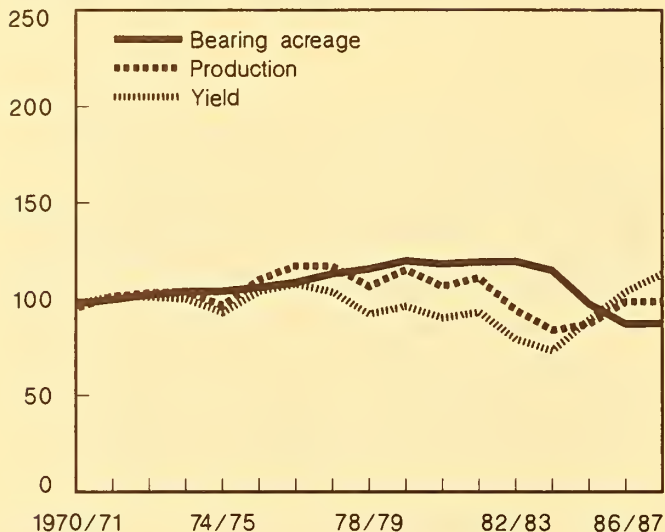
\$ per box



Grapefruit: Acreage, Yield, and Production

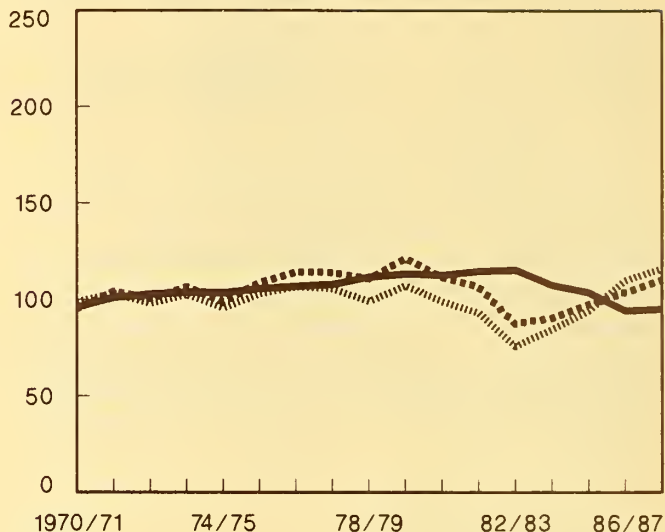
United States

% of 1970/71-1972/73 average



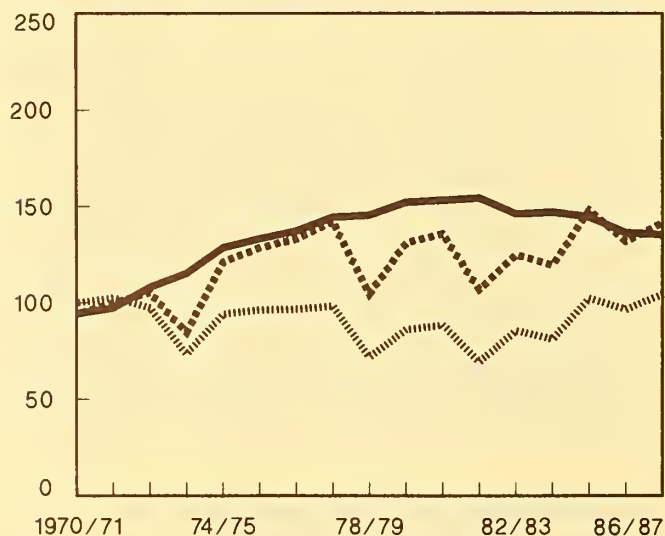
Florida

% of 1970/71-1972/73 average



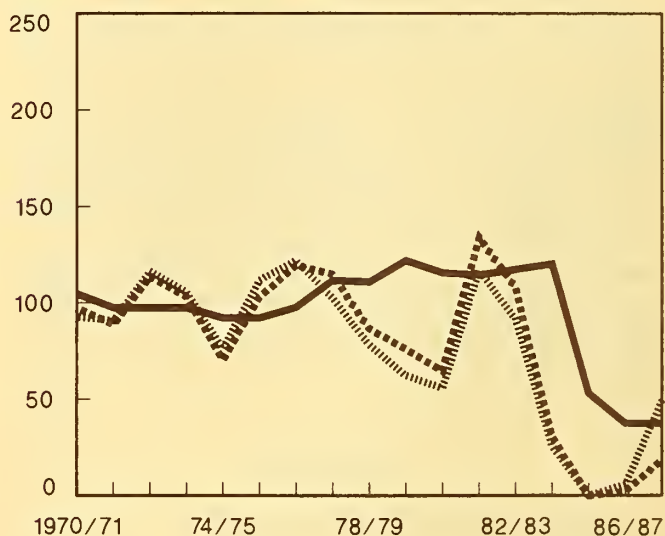
California and Arizona

% of 1970/71-1972/73 average



Texas

% of 1970/71-1972/73 average



fiscal year 1988. The bulk of the fund will be used to promote fresh grapefruit in Western Europe and Pacific Rim countries. Shipments to Japan are expected to reach a record volume during the 1987/88 season. Florida shippers discontinued using ethylene dibromide (EDB) in grapefruit bound for Japan early during the current shipping season in favor of cold treatment or shipments originating in zones designated as "fly free."

Reduced available supplies of grapefruit for processing have raised prices sharply above a year ago. As of February 13, delivered-in prices of grapefruit processed for frozen

concentrated grapefruit juice (FCGJ) were quoted at \$6.74 a box, compared with \$5.83 a year earlier. In view of strong export demand for fresh grapefruit, prices for processing grapefruit are likely to remain strong.

Reduced Grapefruit Juice Packs

Reduced supplies of grapefruit for processing have resulted in a smaller pack of grapefruit products (table 5). Through mid-February, the net pack of Florida FCGJ, at 8.6 million gallons, was running well below a year ago. In response to higher prices,

movement has been running well behind last season. The current f.o.b. price is \$4.67 a dozen 6-ounce cans (Florida canneries), 12 percent above a year earlier. The sharply reduced pack has caused stocks as of February 13 to drop well below a year ago. In light of significantly higher fruit prices, FCGJ prices are expected to stay firm even though movement is sluggish.

The pack of Florida chilled grapefruit juice (excluding single-strength reprocessed) through February 13 totaled 12.8 million gallons, slightly below last year. Movement so far has been moderately behind last season in response to strong prices. Larger carryin stocks more than offset reduced pack and movement--resulting in sharply larger stocks as of February 13.

Table 5.--Grapefruit used for frozen concentrate, Florida, 1984/85-1987/88

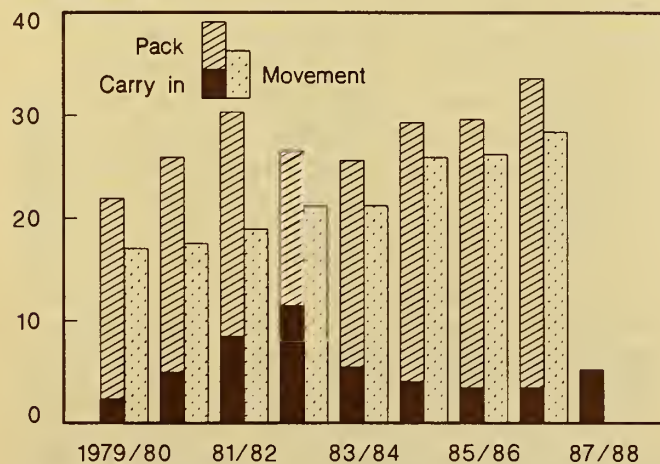
Crop year	Grapefruit	Used for frozen concentrate		Yield per box
	Million boxes	Percent	Gallons 1/	
1984/85	44.0	23.0	52.3	1.08
1985/86	46.8	21.6	46.2	1.20
1986/87	49.8	24.1	48.4	1.20
1987/88 2/	52.0	N.A.	N.A.	1.18

1/ Gallons per box at 40.0 degree Brix equivalent. 2/ Preliminary. N.A. = Not available.

SOURCES: Citrus Fruit Annual, NASS, USDA and Florida Citrus Processors Association.

Florida Supply and Movement of Frozen Concentrated Grapefruit Juice

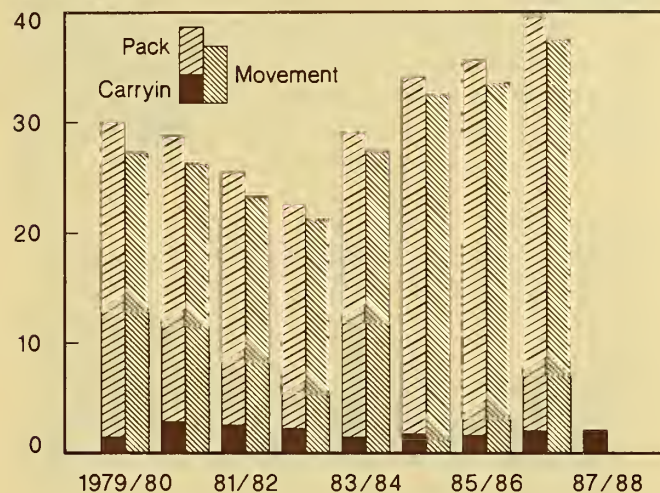
Million gallons



40° Brix. Pack includes imports.

Florida Supply and Movement of Chilled Grapefruit Juice

Million gallons



Sluggish movement has caused the total pack of Florida canned grapefruit juice to fall to 3.1 million cases (No. 24/2's) as of February 13 from 3.9 million cases a year ago. The slow movement is due to higher prices and consumers' increasing preference for chilled and frozen concentrated grapefruit juice. The current f.o.b. price for canned grapefruit juice is quoted at \$11.25 a dozen 46-ounce cans (Florida canneries), compared with \$10.15 a year ago. Strong fruit prices are expected to keep prices firm.

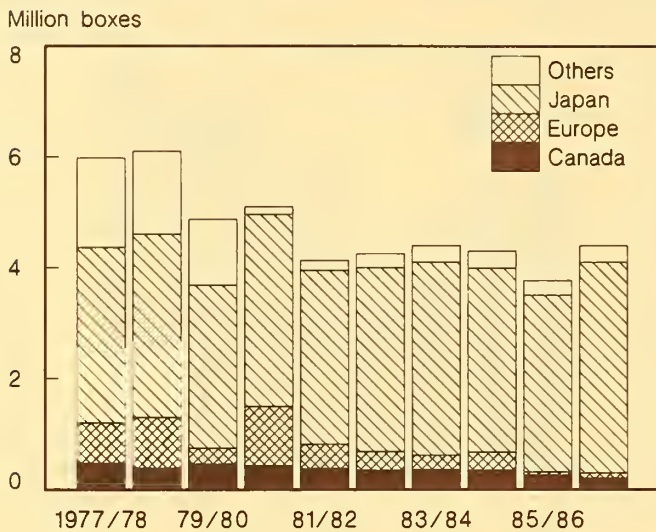
Lemons

Lemon production in Arizona and California in 1987/88 is expected to total 23.5 million boxes, 18 percent below the previous season's utilized production. California's forecast is 18.5 million boxes, 14 percent smaller, while the Arizona forecast is 5 million boxes, 30 percent less than last season's large utilized crop.

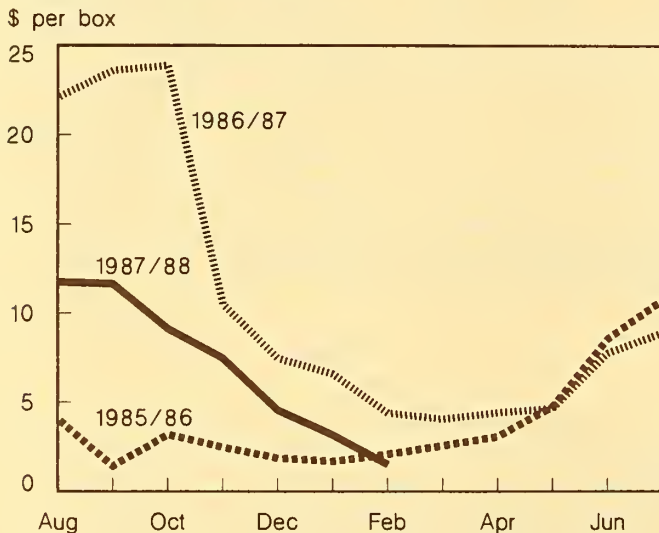
Because of a smaller crop, total utilization of lemons through mid-February was well below a year earlier. Reduced movement was due mostly to a sharp decrease for processing use. Deliveries to the domestic fresh market were up slightly while export shipments were down fractionally.

Export markets are expected to improve from the early season sluggishness. Although U.S. lemon production is down sharply, supplies of export grade lemons are likely to be adequate. Sales to Japan, the leading

U.S. Exports of Fresh Lemons



All Lemons: U.S. Equivalent On-Tree Returns Received by Growers



customer, should be substantial as the dramatic appreciation of the yen against the dollar should improve profit margins for importers. Sales to Western Europe could increase because the weather damage sustained by Spain's lemon crop early in November will reduce exportable supplies.

Early season f.o.b. prices for fresh lemons were very strong, but with increased shipments, prices have declined to below a year ago. In mid-February, the f.o.b. price was quoted at \$8.10 a carton, compared with \$9.61 a year earlier. Nevertheless, the season-average price probably will surpass last season's because of sharply reduced supplies.

Other Citrus

The February 1 forecast for the 1987/88 Florida Temple crop is 3.6 million boxes, up 6 percent from both the January forecast and the previous season's production. Harvest as of February 1 was about 20 percent complete. Through February 14, 1.29 million boxes had been utilized, with fresh sales up 16 percent from a year ago. Consequently, fresh sales accounted for 70 percent of total sales, compared with 61 percent a year earlier. However, a significantly reduced quantity of Temples was used for processing. Opening f.o.b. prices in early January were well above year-earlier levels. Increased shipments have weakened prices but they are still significantly higher than a year earlier. With strong demand and higher prices for processing oranges, the season-average price for Temples is likely to be above 1986/87.

February 1 prospects pointed to a Florida tangelo crop of 4.3 million boxes, up 8 percent from both the January forecast and last season. Harvest was active during January and was about 90 percent finished by the end of the month. Because of the larger crop, utilization of tangelos totaled 3.96 million boxes through February 14, with fresh sales and processing use both up 5 percent from a year ago. F.o.b. prices have fluctuated within a very narrow range, but have remained well above a year ago. The season-average price through the end of January was \$6.98 a carton, up 10 percent from a year ago. With a very limited supply for the remainder of the season, f.o.b. prices are not expected to move significantly.

As of February 1, the U.S. all tangerine forecast was 4.35 million boxes, up 2 percent from the January forecast, but 17 percent below last season. The forecast includes all varieties in Florida (Dancy, Robinson, and Honey), as well as production of California and Arizona tangerines, but is comparable with the previous season's production which has been revised for comparison purposes. The Florida forecast is 2.3 million boxes, 5 percent above the January forecast, but 2 percent below the 1986/87 crop. As of February 1, the Florida Dancy and Robinson tangerine harvest was virtually complete, but a larger quantity of Honey tangerines remained for harvest. The California crop forecast, at 1.5 million boxes, was down 37 percent from last season and the

Arizona crop at 550,000 boxes, was 21 percent smaller. Harvest is very active in Arizona and California.

As usual, more tangerines have been sold to the fresh market than for processing. Fresh shipments from Florida through February 14 were moderately above last year's pace. Increased shipments caused the average f.o.b. price through the end of January to be moderately below a year ago for Dancy tangerines. However, f.o.b. prices through February 21 for Honey tangerines were 10 percent above a year ago, averaging \$12.72 a carton.

FRESH NONCITRUS

The Nation's utilized production of the leading noncitrus fruit crops, excluding avocados, totaled 14.8 million tons in 1987, 13 percent more than a year earlier, but below the 1980 record of 14.9 million tons. Decreased production of cranberries, dates, figs, grapes, olives, and pomegranates was more than offset by increases in all other noncitrus fruit crops.

The 1987 bearing acreage of noncitrus fruit is estimated at 1.87 million, down 4 percent from 1986 as a decline in miscellaneous noncitrus acreage more than offset increase in the major deciduous fruit acreage (table 6).

The value of utilized production for noncitrus fruit crops totaled \$3.4 billion (excluding avocados, figs, kiwifruit, pomegranates, and California prunes), down 3 percent from 1986 but up 9 percent from 1985. Apples, tart cherries, cranberries, olives, pears, and California plums registered the largest decreases in value, while apricots, sweet cherries, and grapes led the major increases.

Apples

Record Crop

U.S. commercial apple production totaled 9.94 billion pounds in 1987, 25 percent more than a year earlier and 13 percent above the 1980 record of 8.82 billion pounds. Good spring weather in all regions contributed to heavy fruit set and larger than normal fruit size. Additionally, young trees are entering commercial bearing age. Apple production could increase further in the next several years if good weather prevails. Also, more trees will reach their full bearing potential in several leading producing States, such as Washington, California, Michigan, and New York.

Of total production, 9.94 billion pounds were utilized, 25 percent more than in 1986. There were 2.93 billion pounds utilized in the East, up fractionally from the previous year. New York, the leading State in the region,

Table 6.--Bearing acreage, fruits and tree nuts, United States, 1980-87

Year	Citrus fruit 1/	Major deciduous fruits 2/	Minor fruits 3/	Tree nuts 4/	Total fruits and tree nuts 5/
1,000 acres					
1980	1,129.5	1,654.5	178.7	559.0	3,521.7
1981	1,298.0	1,628.6	197.9	560.9	3,685.4
1982	1,116.1	1,621.6	199.4	577.6	3,514.7
1983	1,084.0	1,693.8	204.5	598.5	3,580.8
1984	1,002.6	1,716.4	204.6	622.9	3,546.4
1985	894.1	1,735.4	211.1	656.9	3,497.5
1986	806.2	1,740.5	213.5	664.2	3,434.4
1987 6/	818.3	1,744.7	127.9	673.5	3,364.4

1/ Grapefruit, lemons, limes, oranges, tangelos, tangerines, and Temples. Acreage is for the year of harvest. 2/ Commercial apples, apricots, cherries, grapes, nectarines, peaches, pears, plums, and prunes. 3/ Avocados, bananas, cranberries, dates, figs, kiwifruit, olives, papayas, pineapples, and pomegranates. 4/ Almonds, filberts, macadamia nuts, pistachios, and walnuts. 5/ Some totals may not add due to rounding. 6/ Preliminary.

SOURCE: Noncitrus Fruits and Nuts Annual, NASS, USDA.

utilized 970 million pounds, up 8 percent. In the Central States, utilized production was up 48 percent to 1.56 billion pounds. All States showed big gains, but utilized production in Michigan, the region's leading producer, totaled 1.05 billion pounds, up 50 percent from 1986's small crop.

In the West, 4.94 billion pounds were utilized, up 26 percent from 1986. Washington, the leading State, utilized a record 4 billion pounds, 27 percent more than the previous year. Consequently, Washington accounted for 42 percent of total U.S. apple production. Production in California, the region's second leading producer, increased 26 percent from the previous year.

Sharply Larger Supplies Remain

Primarily reflecting a record Washington crop, stocks of fresh apples in cold storage at the beginning of February totaled 3.16 billion pounds, 37 percent more than a year ago (table 7). Significant increases were indicated for both regular and controlled atmosphere storages. Approximately 82 percent of the apples were in controlled atmosphere storage, up 34 percent from a year ago. Apples in regular cold storage rose 50 percent. Most of the increases in cold storage were in Central, Mountain, and Western regions.

Significantly Lower Prices

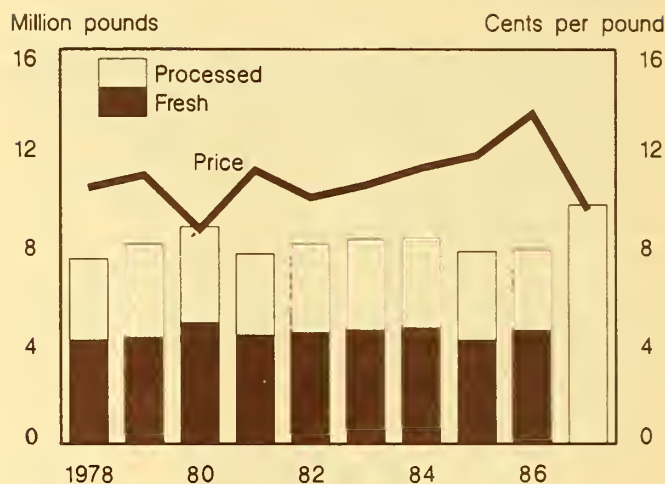
The record crop drove fresh apple prices significantly lower than a year ago. Demand has been strong. Through early February,

Table 7.--Apples, fresh cold storage holdings at end of the month, 1985-87

Months	1985	1986	1987
Million pounds			
January	2,464.2	2,307.2	3,158.9
February	1,858.1	1,550.2	1,720.2
March	1,372.3	1,039.3	1,174.0
April	910.4	612.6	751.9
May	485.1	266.9	386.3
June	291.2	118.8	203.8
July	131.9	25.4	74.9
August	34.4	7.9	4.1
September	1,712.2	2,349.5	2,684.2
October	3,668.3	4,124.5	5,470.2
November	3,342.5	3,532.2	4,684.9
December	2,724.7	2,891.7	3,944.3

SOURCE: Cold Storage, NASS, USDA.

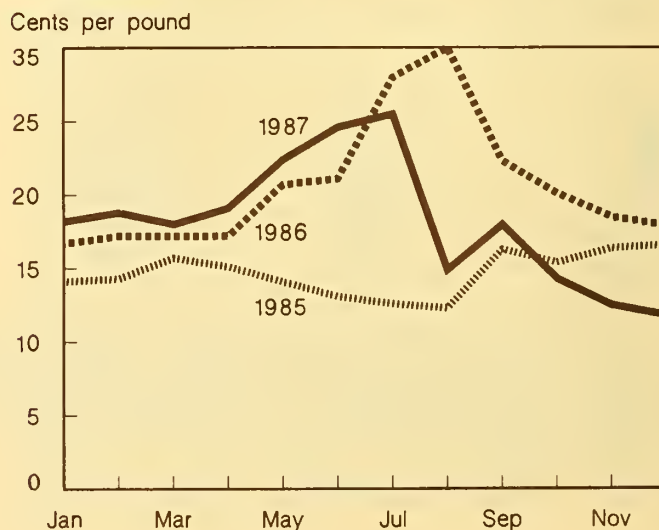
U.S. Apple Production, Utilization, and Prices



total arrivals of fresh apples at 22 major cities were 674 million pounds, up 3 percent from a year earlier.

As of mid-February, f.o.b. prices for fresh apples at major shipping points were significantly below year-earlier levels. Prices for Washington apples were very weak in response to record supplies. At Yakima Valley-Wenatchee, Washington, f.o.b. prices for Golden Delicious apples in mid-February were quoted at \$12-\$13 a tray pack for U.S. extra fancy, sizes 80-88, compared with \$16-\$17 a year ago. Larger crops in the Central and East regions also caused prices for processing apples to be generally lower than in 1986. Consequently, the 1987 U.S.

Fresh Apples: U.S. Average Price Received by Growers



season- average apple price for all sales is estimated at 9.5 cents a pound, down almost 30 percent from 1986 (table 21).

Lower f.o.b. prices caused retail prices of Red Delicious apples to be well below a year ago. Prices have been lower since last August. In January, retail prices averaged 57.1 cents a pound, down 12 percent from a year earlier. With large remaining supplies, fresh apple prices are expected to remain low.

Exports Strong, Imports Weak

The weak dollar, abundant supplies, lower prices, and aggressive promotional activities have contributed to strong exports of fresh apples. During the first 6 months of 1987/88 (July-December) offshore exports of fresh apples totaled 130,945 metric tons, up 46 percent from a year ago. More than half the exports were destined for the East Asia and Pacific region, up 33 percent from a year earlier. A sharp increase in shipments to Hong Kong was also indicated. Shipments to Western Europe were very strong. Exports to the Middle East and North Africa have recovered from low levels a year earlier, due primarily to Saudi Arabia and United Arab Emirates.

U.S. offshore apple sales are forecast to reach 190,000 tons in 1988. The Far East should once again be the primary export market and post the biggest increase over 1987. Lower production in Western Europe should mean larger imports of U.S. apples and sales to the Middle East should rise. Some of the credit for increased apple exports goes to the TEA program, which allocated \$1.4 million to apple export promotion in fiscal year 1987. Another \$1.5 million will be allocated in fiscal year 1988. TEA funds for apples are targeted for three top export markets: Western Europe, Asia, and the Middle East.

U.S. imports of fresh apples totaled 34,123 metric tons during second- half 1987, down 15 percent from a year ago. U.S. purchases from Canada rose sharply but purchases from New Zealand declined significantly. The United States bought a large amount of fresh apples from South Africa last season, but none this season because the October 1986 trade embargo is still in effect. On the other hand, a very small quantity of fresh apples was imported from

France, because plant quarantine restrictions were imposed on French apples. Although the restriction was lifted in December 1987, French authorities have decided not to participate and will not ship any apples to the United States in the 1987/88 marketing season.

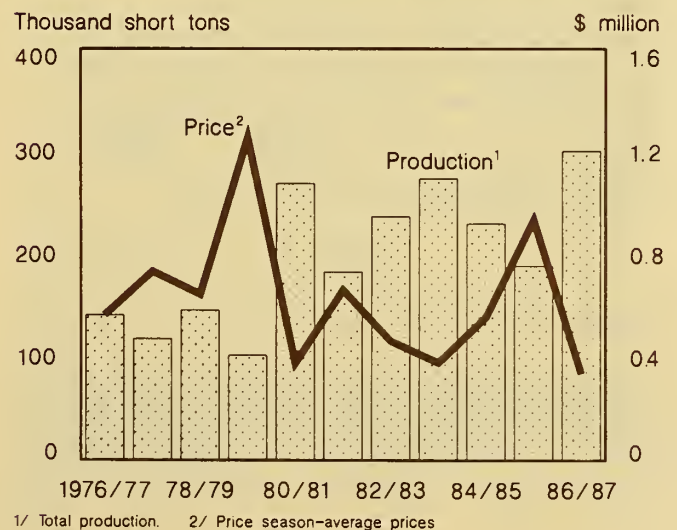
Avocados

Record 1986/87 Crop

Production of California and Florida avocados during 1986/87 was a record 300,700 tons, up 60 percent from 1985/86 and 10 percent above the 1983/84 record. The California crop, at 276,000 tons, was 73 percent larger and accounted for 92 percent of U.S. production. The Florida crop, at 24,700 tons, was down 13 percent, and its share of U.S. production declined from 15 percent in 1985/86 to 8 percent in 1986/87. Bearing acreage is still trending upward, increasing from 85,200 in 1985/86 to 86,100 in 1986/87, while yield per acre rose in California and fell in Florida.

Because of the larger crop, the U.S. average grower price fell to \$338 a ton, from \$949 in 1985/86. Consequently, the total value of the crop amounted to only \$102 million, compared with \$179 million in 1985/86. Even with its sharply larger crop, California's share of the total U.S. value declined from 91 to 90 percent.

U.S. Avocados: Production and Prices



Adverse Weather Hits California Avocados

Adverse weather during December and January has caused some loss of California avocados and damage to small branches. Evaluation of the damage continues as it typically takes several weeks to assess the full extent of damage. According to an early industry estimate, the loss could be 10 to 15 percent of the crop. However, the problem will be with next year's crop. Some of the trees that came back very nicely after the previous year's freeze got hit again, and they are not going to be able to flower next year. Therefore, producing trees for next year will be down again. Shipments through January were 2.01 million bushels (50 pounds per bushel), down slightly from a year ago. Because of the reduced supplies from the freeze and windstorm damage, f.o.b. prices rose in late January. F.o.b. prices in Southern California in mid-February were quoted at \$25-\$27 a 2-layer tray-pack carton for Hass varieties, size 40, compared with \$14 a year ago. Prices are likely to fall when shipments increase seasonally, but are expected to remain above a year ago.

The Avocado Administrative Committee places the January forecast of Florida avocados for certified shipments during 1987/88 at 1.08 million bushels, up 12 percent from the previous season. Shipments through January totaled 1.03 million bushels, 16 percent ahead of last season's pace. Consequently, remaining supplies are much smaller than a year earlier, even with a larger crop. Because of seasonally reduced shipments, prices for Florida avocados have risen. F.o.b. prices were quoted at \$5.25-\$6.50 (sizes 10-14) a layer carton in mid-February, compared with \$5-\$6 a year ago. With the smaller remaining supplies in Florida and the freeze damage in California, prices are expected to strengthen further during the remainder of the season.

Bananas

Imports Down Fractionally

U.S. banana imports totaled 2.94 million metric tons during 1987, down fractionally from 1986 (table 8). Reduced imports were reported from Colombia, Costa Rica, Ecuador,

and Guatemala, while increased imports were indicated for Honduras and Panama. Because of the outbreak of black signatoka disease in three banana plantations in Emeraladas, which accounts for about 10 percent of the total output, imports from Ecuador were down 2 percent from a year ago. Black signatoka is a fungus that destroys the leaf system of the banana plant, causing the fruit to be undersized and fall from the plant, or fail to ripen. Nevertheless, Ecuador retains its position as the top U.S. banana supplier. On the other hand, Honduras increased shipments 16 percent to 586,300 metric tons and regained its position as the number-two supplier.

Colombia, a major banana-producing country, exported 4 percent less to the United States, while shipments from Guatemala to the United States fell 15 percent because of an internal labor problem. In contrast, imports from Panama increased 4 percent from 1986.

Despite reduced imports, retail banana prices averaged 36.5 cents a pound in 1987, down 5 percent from 1986. After a sharp increase in prices in December, retail banana prices fell slightly to 37.4 cents a pound in January. The price was still 6.3 percent more than a year ago. Banana prices may remain relatively high since total arrivals at 22 major cities so far this season have been sharply below a year ago.

Table 8.--Fresh banana imports by country of origin, United States, 1984-87

Country	1984	1985	1986	1987
1,000 metric tons				
Colombia	468.9	439.4	511.7	492.3
Costa Rica	585.1	534.5	561.5	551.2
Ecuador	499.6	720.4	733.4	720.0
Guatemala	182.8	246.8	282.3	239.7
Honduras	537.0	568.6	507.6	586.3
Nicaragua	68.0	46.7	0	0
Panama	177.0	343.5	252.2	262.8
Other	58.8	68.9	94.3	88.2
Total	2,577.2	2,968.8	2,943.0	2,940.5

SOURCE: Bureau of the Census, U.S. Department of Commerce.

Grapes

1987 Crop was Slightly Smaller

The 1987 U.S. grape crop totaled 5.2 million tons, down fractionally from 1986, but almost 20 percent below the record 1982 crop. The 1987 bearing acreage continued to fall to 761,160, down 2 percent from 1986. Some raisin grape acres have been enrolled in the California Raisin Diversion Program. In 1987, 15,000 acres were enrolled, compared with 50,000 acres in 1986, and 30,000 in 1985. The yield per acre also declined to 6.97 tons, compared with 7.25 tons in 1986. Drought and other factors reduced the yield potential by lowering berry and cluster size. California experienced the driest year since 1978.

California grape production totaled 4.6 million tons, 4 percent less than the 1986 crop and the smallest in the last 5 years. Consequently, California accounted for 88 percent of the U.S. crop, compared with 91 percent in 1986. Utilized production of wine variety grapes in California, at 1.9 million tons, was down 10 percent from the previous year. Utilized production of table variety grapes was 500,000 tons, 19 percent lower. Production utilized from raisin variety grapes at 2.2 million tons, was up 8 percent from the previous year.

Total production from other States, at 604,250 tons, was 32 percent above 1986, with all States except Arkansas and Missouri showing increases. With bearing acreage trending upward, Washington became the second largest grape State with a crop of 249,500 tons, up 60 percent. Grape production in New York was 178,000 tons, up 8 percent. Pennsylvania production was 62,500 tons, 4 percent above 1986, while Michigan produced 60,000 tons, 88 percent above the previous year's small crop. Arizona produced a record crop of 31,000 tons, 35 percent above 1986.

Due primarily to larger raisin grape production, grapes used for processing rose slightly from 1986. Consequently, the share of total production for processing outlets increased from 85 percent in 1986 to 86 percent in 1987. Larger tonnage utilized and higher prices caused the total value of grapes used for processing to rise 12 percent above the previous year. Despite an 8-percent

decrease in grapes used for fresh market, sharply higher prices caused a 6-percent increase in the total value of fresh use.

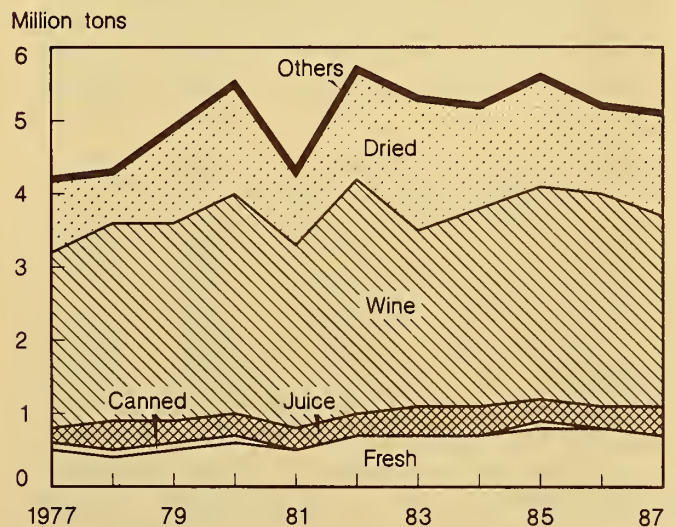
The increase in tonnage of grapes for processing use was attributed mainly to rising use for drying. About 33 percent of total grape tonnage processed was used for drying, compared with 28 percent in 1986. The strong movement and the larger California raisin grape production contributed to the increased drying. The smaller California wine grape production and sluggish wine shipments from California contributed to reduced crushing for wine. However, the volume of grapes crushed for wine in New York and Washington rose sharply from 1986.

Sharply increased Concord grape production in the Great Lake States and Washington pushed the quantity of grapes crushed for juice in the United States well above 1986. In contrast, because of a smaller Arkansas crop, the quantity of Concord grapes crushed for juice in that State was down substantially. The 1987 grape crop used for canning, at 40,000 tons, remained unchanged from the previous year.

Prices Strong

In response to reduced shipments, the U.S. average price for fresh market grapes in 1987 is estimated at \$532 a ton, 15 percent above 1986, with prices ranging from \$240 in Washington to a \$1,090 a ton in Georgia.

U.S. Grapes: Utilization



California, the leading fresh market supplier, reported an average price of \$516 a ton, up 17 percent from the previous year. Total arrivals of domestic table grapes at 22 major markets through early February were running 10 percent behind last year's pace.

U.S. grower prices for all grapes for processing use averaged \$203 a ton, up 12 percent from 1986. Higher prices were indicated for all States. Prices for California grapes averaged 11 percent higher, with increases reported for all three types of grapes, particularly raisin variety grapes. Strong demand for raisins probably contributed to a 22-percent rise in raisin variety prices. Despite larger tonnage crushed for juice, grapes for juice averaged \$205 a ton, \$25 above the previous year. Grapes used for canning rose to \$220 from \$210 in 1986.

Pears

Record Crop in 1987

U.S. pear production in 1987 totaled 931,250 tons, up 22 percent from 1986. Virtually all the crop was utilized (table 9). The larger production reflected increased acreage and yield. The three Pacific Coast States produced 892,000 tons, 23 percent more than a year earlier, and accounted for 96 percent of the total crop. Bartlett production in the Pacific Coast States totaled 575,000

tons, up 23 percent, while other pears, at 317,000 tons, were up 21 percent. Most other States except Colorado and Utah reported decreased production.

The larger crop has resulted in increased use for both fresh and processing outlets, but processing use accounted for a slightly larger share of the total crop. Bartletts used for processing gained 27 percent in 1987 and processing's share of the crop rose to 73.2 percent, from 72.1 percent a year earlier. Smaller carryover stocks and strong demand for canned pears probably contributed to the increased share for processing use.

Remaining Supplies Sharply Larger

The larger crop has contributed to a sharply increased stock of winter pears. At the beginning of February, cold storage holdings of winter pears totaled 198 million pounds, up 16 percent from a year ago (table 10).

Total arrivals at 22 major markets through early February were significantly above year-earlier levels. Sharply increased supplies of both apples and pears have weakened winter pear prices. In February, U.S. grower prices for fresh winter pears averaged \$193 a ton, compared with \$366 a year ago. Likewise, retail prices averaged almost 24 percent lower in January than a

Table 9. --Pears: Utilized production by States and Pacific Coast, variety composition, 1985-87

State	1985	1986	1987	Pacific Coast	1985	1986	1987
	Short tons				Short tons		
Connecticut	1,500	1,600	1,450	Washington:			
New York	16,000	18,000	14,500	Bartlett	111,000	126,000	171,000
Pennsylvania	2,600	3,800	3,050	Other	114,000	140,000	165,000
Michigan	8,000	11,000	8,000	Total	225,000	266,000	336,000
				Oregon:			
				Bartlett	75,000	50,000	78,000
				Other	118,000	112,000	140,000
Colorado	5,900	1,750	6,400	Total	193,000	162,000	218,000
Utah	2,500	2,200	3,200	California:			
Washington	225,000	266,000	336,000	Bartlett	282,000	285,000	326,000
Oregon	193,000	162,000	218,000	Other	10,500	9,000	12,000
California	292,500	294,000	338,000	Total	292,500	294,000	338,000
				3 States:			
				Bartlett	468,000	461,000	575,000
				Other	242,500	261,000	317,000
United States	747,000	760,350	928,600	Total	710,500	722,000	892,000

SOURCE: Noncitrus Fruits and Nuts Annual, NASS, USDA.

Table 10.--Pears, fresh cold storage holdings
at end of the month, 1985-87

Months	1985	1986	1987
1,000 pounds			
January	134,179	170,869	198,098
February	89,887	101,326	127,126
March	59,072	65,048	92,082
April	34,070	32,604	53,651
May	10,280	4,783	21,146
June	1,531	712	1,722
July	5,054	74,779	11,818
August	92,529	130,001	195,172
September	398,699	325,123	505,370
October	298,851	333,177	425,786
November	222,220	281,227	338,764
December	183,162	214,698	279,353

SOURCE: Cold Storage, NASS, USDA.

year ago. Prices are expected to remain lower during the balance of the season.

The U.S. season average grower price for the 1987 pear crop is tentatively estimated at \$194 a ton, down 28 percent from a year ago as sharply reduced prices for fresh use more than offset a slight increase in prices for processing use. Smaller carryover stocks and strong demand for canned pears strengthened prices for processing use for both Bartletts and "other varieties."

PROCESSED NONCITRUS

Supplies of processed noncitrus fruit will be mixed during the remainder of the 1987/88 season. Shipments of most canned fruits are running ahead of last season. Supplies of most canned fruit are tight and prices have advanced. Stocks of frozen fruit and berries in cold storage at the beginning of February were well above a year ago, primarily reflecting significantly increased stocks of peaches and strawberries. Prices are likely to weaken somewhat.

Supplies of dried prunes are ample, while those of raisins are adequate. Movement has been strong. Strong demand and higher grower prices for raisin type grapes have kept raisin prices relatively firm. In response to strong demand and tight supplies, prices for large sized prunes have been firm, while small sized prune prices have been weak. Prices are likely to remain steady for the remainder of the season.

Canned

The 1987/88 pack of most canned fruit is likely to exceed last season because of larger crops, even though the packing season is not yet complete (table 22). Larger crops of Clingstone peaches and Bartletts resulted in increased packs of canned peaches, pears, fruit cocktail, and mixed fruit. A sharply increased pack of canned apricots from the previous year's small pack was also recorded. Even with larger packs, depleted beginning stocks have resulted in tight supplies. Because of the significantly larger crop in Michigan, the total pack of canned tart cherries was well above the previous season, up 87 percent. The 1987 canned sweet cherry pack is up 38 percent from 1986. The increased output more than offset reduced carryin stocks, causing total supplies of canned sweet and tart cherries to rise well above the preceding season.

Shipments of most canned fruit are running well above the previous season's pace. Exports of canned fruit have been mixed this season through December. Exports of canned apricots, sweet and tart cherries, and mixed fruit have been strong, but performance varied with areas and items.

Shipments of most canned fruit to the East Asia and Pacific region rose sharply. Japan and Taiwan have also been strong markets for several canned fruit items. The weak dollar and the infusion of TEA funds have contributed to the increase. On the other hand, exports to the EC remain negligible. The EC after long negotiation with the United States on subsidies to canned fruit processors, agreed to reduce subsidies 25 percent in July 1986, and in July 1987 the EC eliminated the processing element of its subsidy program.

The value of canned fruit exports to offshore destinations in 1988 is forecast to reach the highest level in the last 5 years. U.S. exporters are determined to maintain markets that have improved since the infusion of TEA funding in 1987. For 1988, \$5.95 million have been allocated to the California Cling Peach Advisory Board for export promotion. Competitive pricing from a weak U.S. dollar also will fuel the export increase, despite a slight dollar-denominated increase in unit value.

With strong shipments, supplies of most canned fruit, particularly peaches, pears, and fruit cocktail, will be tight through the balance of this marketing year. Supplies could remain tight through 1988/89 based on the current stock situation and the fact that less bearing acreage for Cling peaches and Bartlett pears will be available for harvest this year than in 1987, according to the industry forecast. Tight supplies and strong demand have caused higher canned fruit prices. The BLS January Producer Price Index stood at 113.8 (1982=100) 2.1 percent above a year ago. Tight supplies will keep canned fruit prices firm during the remainder of the season.

Dried

Supplies of dried fruit during the remainder of the season should be adequate to ample. Demand for raisins has risen and consequently, prices have been firm. Movement of dried prunes has also increased as prices have been firm for large sized dried prunes.

With a slightly larger raisin grape crop and increased demand, output of raisins at 357,700 tons (dried basis) this season was well above the preceding season. Through January 30, deliveries to handlers amounted to 351,461 tons, up 37 percent from a year ago.

Combined raisin shipments during August-January to domestic and Canadian markets were up 9.56 percent from a year ago, due primarily to larger domestic shipments. Exports rose 9.3 percent with strong gains from the EC, the Middle East, and North Africa. However, purchases from the East Asia and Pacific region fell moderately with decreases reported for both Japan and South Korea, the two leading customers.

World raisin prices are expected to be firm throughout 1988, but the relatively low value of the dollar relative to other currencies should boost U.S. sales. Sales to the EC are expected to increase with the targeted promotion efforts by USDA. Prospects are especially good for increased exports to Spain, the EC's fastest growing raisin market. After a rather disappointing year in 1987, sales in Japan- the largest U.S. export market- should recover. As Turkey focuses more attention to the EC because of reduced competition from Greece, there may be

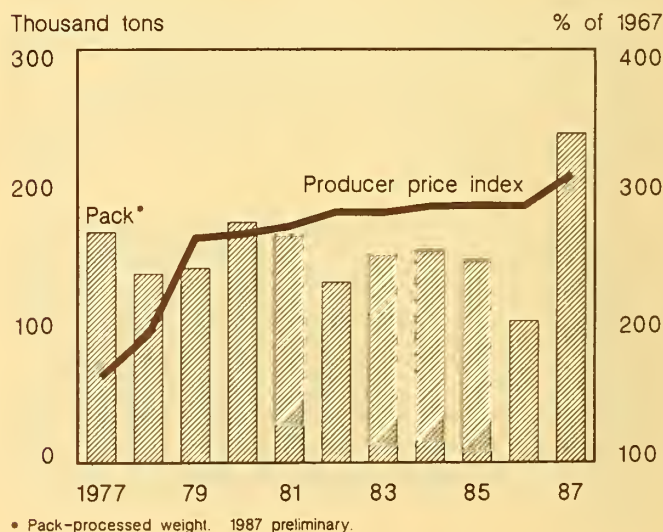
opportunities for increased U.S. exports to the Middle East. Prospects also are encouraging for increased sales to Canada because U.S. raisin prices will remain very competitive in the world market.

Because of higher field prices for raisins and strong demand, producer prices have been above a year ago. Raisin prices are expected to stay strong throughout the season. Nevertheless, the Raisin Administrative Committee has again approved a Raisin Diversion Program for 1988.

The 1987 output of dried prunes was estimated at 230,000 tons (dried basis), the largest crop since 1938 and up 132 percent from the previous season's small production. Despite depleted carryin stocks, the total dried prune supply is the largest in several years.

Shipments of dried prunes through January of this season were up almost 11 percent from a year ago, with increases for both domestic and export markets (offshore destinations). Purchases by Japan, the largest customer, rose 25 percent. Strong gains were recorded for almost every country in the Asian and Middle East regions. Exports to the two regions accounted for one-fourth of the total export. Shipments to Europe rose moderately with strong gains recorded for Italy, Sweden, the Netherlands, and the United Kingdom. Total U.S. dried prune exports are expected to increase about 10 percent in 1987/88. Industry promotion efforts under TEA funding are now

U.S. Dried Prunes



in their second year. These efforts should boost U.S. sales to Western Europe, especially Italy. Sales to Japan are likely to rise due partly to the declining value of the dollar against the yen. However, the relatively small average size of U.S. prunes this season may inhibit sales somewhat.

Because of strong demand and the limited supplies of large-sized dried prunes, the BLS January Producer Price Index, at 99.1 (1982=100), was 5.9 percent above last year. Prices are expected to remain higher throughout the season.

Frozen

At the beginning of February, the supply of frozen fruit and berries totaled 792 million pounds, up 25 percent from a year ago (table 11). Most items showed gains, particularly apricots, boysenberries, peaches, red raspberries, and strawberries. Because of a sharply larger crop, the use of apricots for freezing rose sharply, up almost 83 percent from the previous season. Larger deliveries of most fresh berries to freezers in the Pacific Coast contributed to increased stocks. Frozen peaches packed in California totaled 100.6 million pounds in 1987, up 7 percent from 1986. The larger California pack and sluggish movement have caused the total supply of frozen peaches to more than double.

Table 11.--Stocks of frozen fruit:
End of January, 1985-88

Frozen fruit	1985	1986	1987	1988 1/
	1,000 pounds			
Apples	61,902	69,361	69,645	75,022
Apricots	9,435	5,638	3,498	6,404
Blackberries	10,883	11,485	15,655	19,681
Blueberries	44,944	55,079	43,972	43,304
Boysenberries	2,466	1,741	2,699	4,160
Cherries, tart	74,523	139,226	127,997	135,372
Cherries, sweet	12,870	13,315	11,158	14,219
Grapes	6,742	5,082	2,215	2,866
Peaches	46,399	35,019	32,371	72,501
Raspberries, red	24,458	21,606	23,862	32,956
Strawberries	152,762	137,719	128,042	213,394
Other	176,245	161,211	171,202	171,836
Total	623,629	656,482	632,316	791,615

1/ Preliminary.

SOURCE: Cold Storage, NASS, USDA.

Supplies of frozen strawberries in cold storage were well above year-earlier levels on January 31. Deliveries of strawberries to freezers in Oregon and Washington showed strong gains. Processors in California, the leading producer, received 223 million pounds in 1987, up 8 percent from the previous season. Imports of frozen strawberries (mostly from Mexico) rose sharply in 1987 from 1986.

In California, heavy stocks have depressed f.o.b. prices for frozen strawberries. A lower field price is likely this year. In the Northwest, the prospect of lower field prices has resulted in very sparse plantings. This probably will not have much impact on this year's supply, but will have a significant impact in 1989 and beyond if new plantings do not increase.

BERRIES

Strawberries

Production Up Substantially

The 1987 U.S. commercial strawberry crop was estimated at 1.11 billion pounds, up 9 percent from 1986 due to increased acreage and higher yields. Larger crops were indicated for all principal producing States. California, the leading producer, contributed to most of the increase. However, California's share of the total crop fell from 77 percent in 1986 to 74 percent. Production in Oregon and Washington rose 47 and 71 percent, respectively. Production from the three Pacific Coast States accounted for 85 percent of the U.S. crop in 1987, the same as 1986. Florida, the second largest producing State, harvested a 22-percent larger crop than in 1986.

Because of the larger crop, both the fresh market and processing outlets used more strawberries in 1987. Additionally, smaller stocks of frozen strawberries early in the season contributed to sharply increased deliveries to freezers in the Pacific Coast States. Consequently, 30 percent of the crop went to processing outlets, compared with 27 percent of the 1986 crop. Increased demand kept grower prices for processing use slightly above 1986. On the other hand, the reduced share of strawberries for the fresh market

Table 12.--Strawberry imports,
United States, 1981-87

Calendar year	Fresh	Frozen
	Million pounds	
1981	6.7	60.1
1982	4.5	34.9
1983	5.1	42.5
1984	8.8	50.9
1985	9.6	59.7
1986	12.9	50.7
1987	33.2	79.2

SOURCE: Bureau of the Census, U.S. Department of Commerce.

pushed grower prices well above 1986. The U.S. average price for strawberries for all sales was \$49.40 per cwt, the same as 1986. Based on the larger crop, total value of production amounted to \$549 million, up 9 percent from 1986.

Imports Strong

Imports of fresh strawberries totaled 33.2 million pounds in 1987, 157 percent above a year earlier, while total imports of frozen strawberries in 1987 were up 16 percent (table 12). Most imports of both fresh and frozen strawberries originated from Mexico. Larger available supplies and the depreciation of the Mexican peso against the U.S. dollar have contributed to significantly increased imports. However, New Zealand has increasingly shipped fresh strawberries to the United States. In contrast, imports from Poland, the number-two supplier of frozen strawberries, declined sharply from a year earlier. Imports of frozen strawberries from Mexico are likely to fall because sub-freezing temperatures on January 19-21 in the Zamora and Irapato growing regions have curtailed production, with trade estimates indicating that 30 to 60 percent of the first picking may be lost.

1988 Winter Crop Prospects

As of January 1, Florida winter strawberry acreage was expected to be 5,000, up 2 percent from 1987. Abundant rain aided growth in mid-October and early November. Cooler, drier weather in late November and early December allowed picking to start in the

south central area with virtually no fruit damage.

Opening f.o.b. prices for fresh strawberries at central Florida in early December were quoted at \$22 per 12 pints (medium to large), compared with \$16 a year ago. Prices have dropped sharply with increased shipments. In mid-February, the f.o.b. price fell to \$12, compared with \$14 a year ago. Prices may rise somewhat in the early spring because of reduced supplies. Additionally, California strawberries are expected to reach markets later this season because of the late December freeze which damaged some berry plants in Southern California.

TREE NUTS

U.S. tree nut production in 1987 totaled 928,300 tons, up 57 percent from 1986 and 20 percent above 1985. Production of almonds, filberts, macadamia nuts, and walnuts increased from 1986, while pecan and pistachio production declined. Despite larger production, grower prices of filberts are above last year in response to strong demand. In contrast, pecan prices have fallen because of sluggish movement. Larger crops of almonds and macadamia nuts have lowered grower prices, while smaller pistachio production has pushed grower prices sharply higher.

The value of 1987 utilized production of these edible nut crops, excluding walnuts, is estimated at \$892 million, up 14 percent from 1986 and 46 percent above 1985. Value increased for all 1987 tree nuts except pecans and pistachios.

Almonds

Record Crop

California's 1987 almond crop is estimated at a record 630 million pounds (shelled basis), 152 percent above the small 1986 crop and 7 percent more than the 590-million-pound record set in 1984. Almonds developed well under favorable growing conditions with a very heavy nut set. Larger production was due entirely to higher yields as bearing acreage fell from 412,700 in 1986 to 410,000 in 1987. Even with sharply reduced carryin stocks, supplies are well above

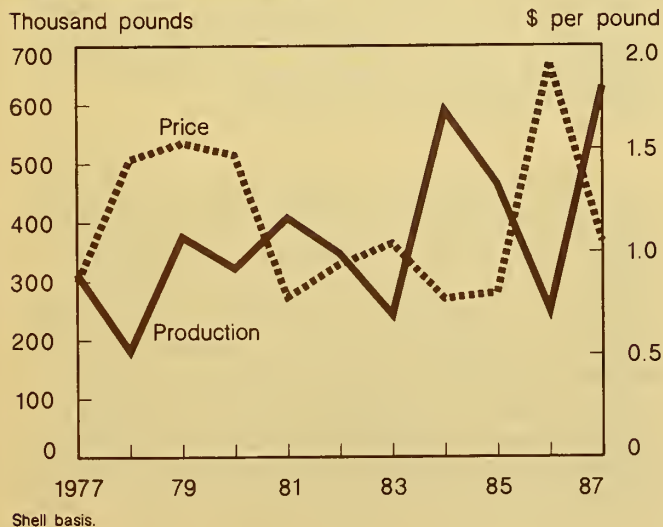
a year ago. Almond production is expected to trend higher even with reduced bearing acreage. So far this season, almond shipments have been strong for both domestic markets and exports.

According to the Almond Board of California, export shipments during the first 7 months of 1987/88 (July- January) totaled 218 million pounds, 74 percent above a year earlier. The increase was largely attributed to bigger exports to West Germany, France, and the Soviet Union. West Germany, the leading customer, purchased 139 percent more than a year earlier, and shipments to France increased 95 percent. Eastern Europe has bought (mostly from the Soviet Union) 17.2 million pounds, compared with 44,000 pounds a year earlier. Sales to the EC and the Soviet Union have benefited from U.S. almonds' price advantage over Turkish filberts.

In contrast, shipments to Japan declined 12 percent, but Japan is expected to increase its purchases as the season progresses. Exports to Asia Minor totaled 9 million pounds, up 130 percent from a year ago. With larger supplies, lower prices, the weak dollar, and continued promotional activities through the Export Incentive Program, export markets should recover strongly from last year's low.

Domestic demand has also improved; shipments totaled 93 million pounds, up 4 percent from a year earlier. With sharply lower prices, domestic shipments should continue to increase from last season.

U.S. Almond Production and Prices Received by Growers



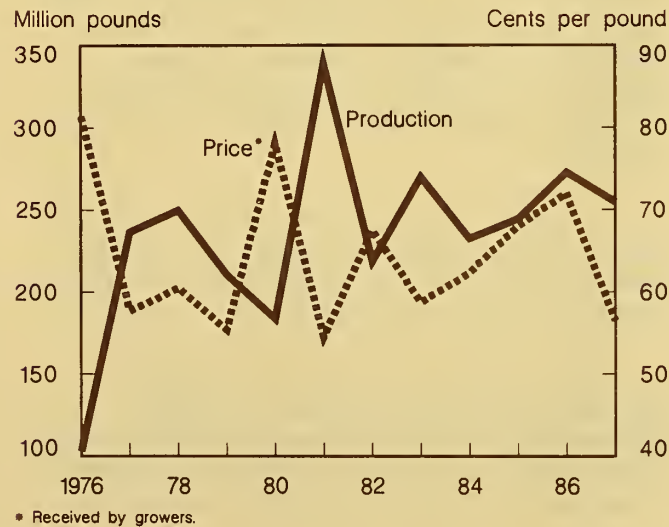
Opening prices for almonds were well below a year earlier, but improved demand and the establishment of a 20- percent reserve have strengthened prices somewhat. Nevertheless, ample supplies in the United States and Spain have caused prices to drop dramatically from the shortage- induced levels of 1986/87. The 1987 average grower price for shelled almonds is estimated at \$1.05, compared with \$1.92 in 1986 and 80 cents in 1985.

Pecans

Moderately Smaller Production

The 1987 U.S. pecan crop is estimated at 255 million pounds, in- shell basis, 7 percent less than in 1986, but 4 percent above 1985. The crop estimate has been reduced because weather during October and November turned extremely dry in many areas of the pecan belt. The dry weather caused nut weight to decline and shucks to open very late or stick to the hull. Some States in the Mississippi River basin and west of the Mississippi reported that the spring freeze caused more damage than earlier expected and nut kernels did not fill normally because of drought conditions last summer and fall. Smaller crops were reported for both improved varieties and the native and seedling crops, but each crop's share of the total production remained almost at 1986 levels. Although Georgia is still the leading producer, its crop, at 105 million pounds, was down 12 percent from 1986.

U.S. Pecan Production and Prices



Texas, the second largest producer, recorded a 12-percent increase from 1986's small crop.

At the beginning of February, cold storage holdings of shelled pecans, at 26 million pounds, were near year-earlier levels, while in-shell holdings, at 65 million pounds, were 42 percent lower. Although pecan stocks were down, the smaller crop indicates that shipments have not been very strong even with sharply lower prices.

The season-average grower price is estimated at 56.5 cents a pound, off 22 percent from 1986. Lower prices were recorded for both improved varieties and the native and seedling crops. The smaller crop and lower prices caused the total value of the crop to fall to \$144 million from \$196 million in 1986.

Walnuts

Record Crop

California's 1987 walnut crop is estimated at a record 245,000 tons (in-shell basis), 36 percent above 1986 and 12 percent above 1985. The increase was due to rising acreage and higher yields. The preliminary estimate for 1987 bearing acreage is 182,100, up almost 2 percent from 1986. Even with sharply reduced carryin stocks, the total supply of walnuts is well above last season.

Strong Movement

According to the Walnut Marketing Board, shelled walnut shipments during the first 6 months of 1987/88 (August-January) totaled 79 million pounds, up 10 percent from a year earlier with increases indicated for both domestic and export markets. Of total shipments, 69 million pounds went to the domestic market and 10 million were shipped overseas.

Likewise, shipments of in-shell walnuts during the same period totaled 141 million pounds, up 12 percent with domestic shipments 6 percent higher and exports up 14 percent.

Most walnut exports went to Western Europe, with Spain and West Germany accounting for 30 percent of all shelled walnut exports and 64 percent of the in-shell total. Combined shipments of shelled walnuts to

these two countries rose 43 percent from a year earlier, and shipments of in-shell walnuts were up 19 percent. Exports have been strong because of the weak dollar, reduced import duties on U.S. walnut exports to Europe, larger supplies, and continued promotional activities. The TEA fund will make \$7 million available for promotional activities during the 1987/88 season.

Other Tree Nuts

Filbert production in Oregon and Washington in 1987 totaled 21,500 tons, the second largest crop on record. The crop was 42 percent above the 1986 crop and 13 percent less than the record 1985 crop. The larger crop was due to increased acreage and higher yields. Bearing acreage rose to 25,800 in 1987, up 3.6 percent from 1986 with all the increase in Oregon.

Because of larger crops from the United States, Italy, and Spain, world filbert production in 1987 was up 5 percent from 1986. Turkey, the leading producer, reported a 3-percent decline from 1986. With smaller carryin stocks, Turkey's total supply will be 7 percent below the previous season. Consequently, this season's world supply will be slightly less than the 1986/87 season. Turkey's filbert exports are expected to remain unchanged from last season.

U.S. shelled filbert imports during the first 5 months of 1987/88 (August-December) totaled 513 metric tons, up 57 percent from a year earlier. Imports from Turkey, the top U.S. supplier, rose 57 percent from the previous year. Last year U.S. importers were hesitant to import Turkish filberts for fear of radiation contamination from the Soviet Union's Chernobyl nuclear plant.

The Federal marketing order for filberts establishes 26 percent of the 1987 crop as free and 74 percent as restricted. Free tonnage may be sold in-shell to domestic markets, while the restricted tonnage must be exported, shelled, or disposed of in non-competitive in-shell markets. Strong demand has caused grower prices to rise significantly from the previous season despite a larger crop. The 1987 season-average grower price is estimated at \$880 a ton, up 21 percent from 1986.

The California pistachio crop was 33.1 million pounds (in-shell basis) in 1987, 56 percent less than the record 74.9 million pounds in 1986, but 22 percent above 1985. Of the total, 29 million pounds or 88 percent of the crop was marketable in-shell. The reduced production was primarily due to alternate bearing characteristics of the crop. Production potential is expected to continue to increase in the years ahead, because bearing acreage has trended upward. The 1987 pistachio bearing acreage was estimated at 40,000, 22 percent above 1986. In response to the smaller crop, grower prices were well above the previous year's low. The 1987 season-average price was \$1.34 a pound, compared with \$1.06 in 1986.

Pistachio exports (in-shell) totaled 780 metric tons from September to December, up 182 percent from a year earlier. The United Kingdom is the leading customer, accounting

for 25 percent of the total. During the same period shelled pistachio exports rose 71 percent from a year earlier. Most of the shipments went to the East Asia and Pacific region, Middle East, North Africa, and Latin America, excluding Caribbean countries.

Utilized production for the 1987 Hawaiian macadamia nut crop was a record 45 million pounds, 2 percent above 1986 and 7 percent more than 1985. The increase was due to rising acreage while yield per acre fell from 3,060 pounds in 1986 to 2,880. Production potential is expected to rise in the years ahead, because bearing acreage is likely to continue to increase. The 1987 bearing acreage was 15,600, up 8 percent from 1986 and 16 percent from 1985. Because of the record crop, grower prices fell to an average of 78 cents a pound, compared with 80 cents in 1986.

U.S.-EC Competition in Wine Production and Marketing

by

Gerald B White and David Blandford*

Abstract: A table wine surplus has developed in the European Community where production has outstripped domestic consumption. The surplus places a financial burden on the Community and creates intense competition for U.S. wine producers. U.S. wine producers appear to be cost-competitive with EC producers at moderate and lower exchange values of the dollar against major European currencies. Although the U.S. market will remain important to the European industry, exports of non-premium table wines to the United States will not reach their 1984 levels in the near future if the dollar remains weak relative to EC- country currencies.

Keywords: Wine, exchange rates, costs, France, Italy, trade, marketing

During the late 1970's and early 1980's European Community (EC) exporters supplied a rising share of the U.S. wine market (1). 1/ U.S. imports peaked at 119 million gallons in 1984 with EC-10 countries providing 91 percent of the total. 2/ Imports stood at 112 and 84 million gallons, respectively, in 1985 and 1986. The falling value of the dollar and declining consumption of table wine in the United States have contributed to declining imports. The accession of Spain and Portugal to the EC in 1986 raised the EC-12 share of U.S. table wine imports to 97 percent--about 23 percent of total U.S. consumption. This article reviews trends in the European wine industry and their potential effects on trade with the United States. It also compares yield and cost efficiencies in grape and wine production between the United States and EC

countries and provides an outlook for U.S. wine imports over the next several years.

Italy and France are the two largest wine producing and consuming countries in the world. Other important wine producers within the EC-10 include West Germany, Greece, and Luxembourg. In recent years, the EC-10 accounted for about 27 percent of the area devoted to vines and 60 percent of the world's wine production (10). The addition of Spain and Portugal boosted the EC-12 share to about three-fourths of world production.

Changing Lifestyle Cuts EC Wine Consumption

Per capita consumption averaged 70 liters in the six countries making up the EC at its inception in 1958. By 1985 consumption in these countries had fallen to 56 liters per person. Although consumption grew in four of the countries, reduced intake in Italy and France more than offset these rises. Per capita consumption in France and Italy fell from 130 and 108 liters, respectively, in 1958 to 82 and 81 liters by 1985. Figure 1 illustrates differences in per capita consumption between the United States and selected EC-12 countries. Declining use in the EC-10 has pulled world consumption lower since the mid-1970's (figure 2).

Consumer studies in France indicate that changing lifestyle is an important factor in lowering wine use (2). A switch from high-energy-using manual labor to

*Associate Professors in the Department of Agricultural Economics, Cornell University, Ithaca, New York. This article draws upon research funded under Cooperative Agreement with the Economic Research Service, U.S. Department of Agriculture.

1/ Numbers in parentheses refer to references at the end of the article.

2/ The European Community referred to in this article as the EC-10 includes West Germany, France, Italy, the Netherlands, Belgium, Luxembourg, the United Kingdom, Ireland, Denmark, and Greece. In 1986, Spain and Portugal were added to the EC bringing the membership to 12 (EC-12).

Figure 1
Per Capita Wine Consumption

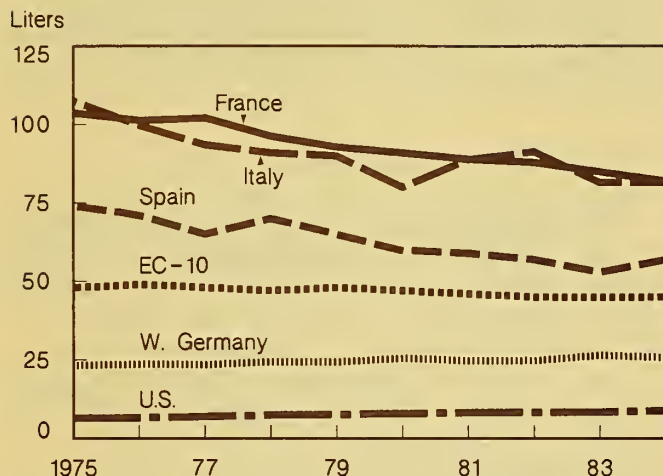
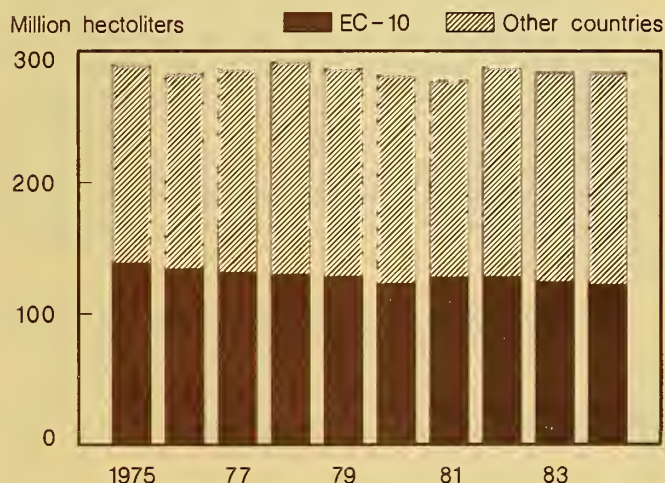


Figure 2
Total Wine Consumption



lower-energy-using work reduced caloric needs of which wine was an important source. In addition wine had an "old product" image that was less in tune with younger people than other beverages such as mineral water, beer, and soft drinks. The findings for France probably also explain declining wine consumption in Italy and Spain, where an exodus of population from the rural economy continues and old traditions are being replaced. Boulet found that even wine producers were drinking less of their own product. On the other hand, there is a noticeable trend toward consumption of higher quality wines produced in specified regions (p.s.r.). 3/ Accordingly, EC policy for the last 15 years has promoted the production of quality wines p.s.r. in place of ordinary table wine.

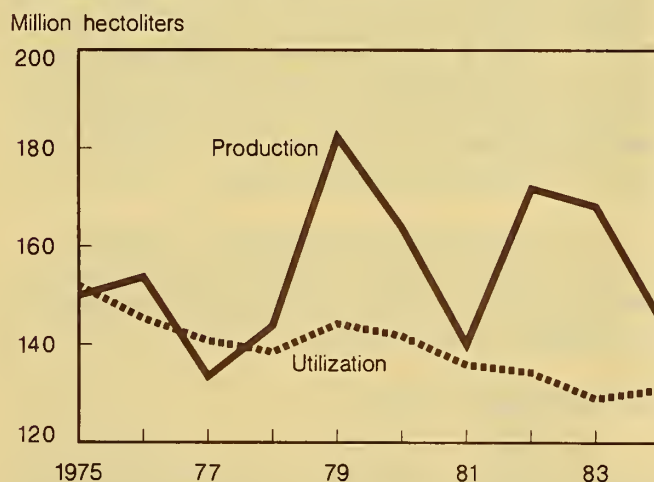
Use Declines, Production Remains High

Figure 3 illustrates the increasing gap between EC-10 utilization and production for the past 10 years. Although area planted to wine-grape vines has gradually decreased, production has not shown a corresponding decline, because rising yields and the crushing of table grapes for wine, especially in Italy, have maintained output. However, distillation programs and growth in net exports have helped maintain balance in an otherwise surplus-ridden EC market.

Reference Prices and Strong Dollar Create Trade Surplus

EC imports from nonmember countries have remained relatively constant over the past 10 years due to preferential market treatment for member-produced wine (figure 4). The EC maintains custom duties on wine which vary by type of wine and alcoholic content. The duty on bottled wines with up to 13 percent alcohol amounted to about 67 cents per gallon at the February 1988 exchange rate between European Currency Units (ECU) and the dollar. The EC also requires compliance with a "reference price" which constitutes a

Figure 3
Wine Production and Utilization in the EC-10

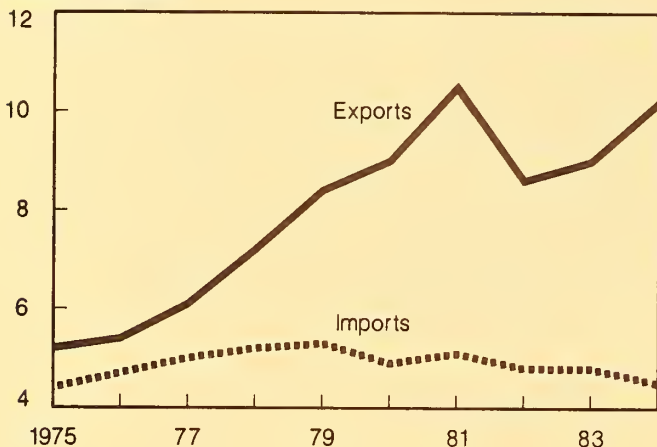


3/ "Quality wines produced in specified regions" such as AOC (Appellation d'Origine Controlee) from France and DOC (Denominazione di Origine Controllata) from Italy.

Figure 4

EC-10 Wine Trade with Nonmember Countries

Million hectoliters



minimum import price for products from outside the Community. If imported wine prices fall below the reference price, a countervailing duty is applied which effectively raises the price to a minimum level (9). Consequently, EC imports have generally ranged between 4.5 and 5.0 million hectoliters since 1980.

Boosted by appreciation of the U.S. dollar against the Italian lira, the French franc, and the German mark from 1982-86, EC wine exports to nonmember countries have more than doubled since the early 1970's (1). The United States represented the largest foreign market, taking 4.3 million hectoliters of the EC-10's total exports between 1982 and 1985. Switzerland and Canada are other important export markets accounting for 1.3 and 1.2 million hectoliters, respectively.

Export refunds for shipments to certain countries (but not the United States) also have promoted EC exports. Refunds ranged from \$14 to \$37 million in recent years (4).

Surplus Wine Distilled

Distillation programs that convert table wine into industrial alcohol represent the EC's primary tool for dealing with surpluses. Expenditures on distillation consume about two-thirds of the EC's total budget for the wine sector. Distillation peaked with the 1983/84 vintage when 37.2 million hectoliters (983 million gallons) were distilled (figure 5).

4/ This compares with total U.S. wine

consumption of less than 23 million hectoliters (600 million gallons). EC programs also assist growers and vintners by financing capital improvements in buildings, processing plants, and removal of vineyards producing low quality table wine.

U.S. Yields Higher than EC

Yield estimates indicate that U.S. grape producers possess a clear advantage in growing grapes (figure 6). West Germany reports some of the highest yields, although they tend to vary greatly because in Germany's northerly climate, grapes frequently suffer from winter or frost damage. German vineyards usually receive abundant moisture and producers manage their vineyards intensively. Germany's grape acreage, however, represents a small fraction of the EC-10 total.

California growers, with over 90 percent of U.S. grape production, report high yields that show more stability from year to year than those in Germany. Irrigated production contributes to high and stable yields and California producers irrigate most of their grapes. California yields generally have exceeded 14 metric tons per hectare in recent years.

French, Italian, and New York State growers report similar yields that fall below

Figure 5

Wine Distilled Under EC Regulation

Million hectoliters



4/ National distillation programs, particularly in Italy and France, have also removed 6-8 million hectoliters of the most recent vintages.

those for California and Germany. Much of the production in southern Italy and France occurs in rather arid areas that are not irrigated. EC yields—which are determined primarily by Italy and France—have averaged around 10 metric tons per hectare, or 4.5 short tons per acre, in recent years. 5/

Wine grape yields provide an indication of production efficiency, but cost may provide a clearer picture of the ability of growers to continue supplying wine grapes in the longer term.

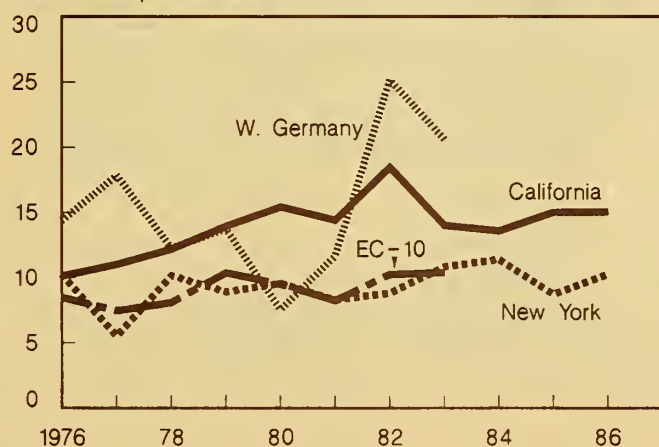
Dollar's Strength Determines Cost Competitiveness

Cost studies indicate that farmers in California's San Joaquin Valley—who produce over 50 percent of the United States' non-premium wine grapes—can supply grapes more cheaply than growers in France and Italy when the U.S. dollar is relatively weak as in 1980 (table 1). However, when the dollar is strong, such as in 1984, producers in France and Italy show similar or lower costs. Although costs were not available for Spanish growers in 1980, their costs in 1984 fell substantially below those for other regions.

Figure 6

Grape Yields

Metric tons per hectare



5/ EC yields, which are reported in hectoliters per hectare, were estimated on the basis of 0.72 liters of wine per kilogram of grapes or 172.5 gallons of wine per short ton of grapes.

New York State growers reported the highest costs during both periods. These costs do not include interest payments and land charges, which may vary from region to region. Cost studies for the various regions are summarized in detail in White and Blandford (11).

A 1986 study indicates that the average cost for producing non-premium table wines and shipping to the eastern United States' market are about equal for Italy, France, and California (table 2)(8). European producers probably derive advantages from lower costs for bottles and other packaging costs and labor. Transportation costs for shipping to the eastern United States are about \$3.00 per case from Italy and France and \$2.00 from California (13).

Based on grape, wine, and transportation cost comparisons, California, France, and Italy have similar total costs for producing and transporting wine to major U.S. markets.

EC-U.S. Competition To Remain Keen

U.S. imports of non-premium table wines from the EC should not reach the levels they did in 1984 in the near future. However, because of its wine surplus, which is projected to reach 20-25 million hectoliters in 1991/92, the EC-12 will continue to place heavy emphasis on exports to the United States. The dollar's value in relation to the French and Italian currencies is important in determining the cost competitiveness of U.S. and EC producers and has affected the volume of EC exports to the United States in the past. It appears unlikely that the dollar will strengthen to its 1984 level in the next few years.

Because of Spain's large volume and low cost for producing non-premium wine, its entry into the EC poses a challenge for Italy and France and the Community's wine policy as a whole. Budgetary costs—already extremely high—will rise further under the current policy. The EC appears to have two options to control expenditures. One entails controlling production through continuation of grants for vineyard removal and prohibitions on planting, perhaps in combination with strict yield limitations. Such an approach would likely raise domestic prices for table wine and place the EC in the continuing position of supporting world prices.

The second alternative would be to lower the support price and let market forces bring production and consumption into balance. This approach would reduce European table wine prices on world markets and in the short run

result in expanding exports, including those to the United States. In the longer term, prices probably would move upward as resources are withdrawn from EC grape and wine production.

Table 1. Adjusted cost comparisons, grapes for table wine, 1980 and 1984 dollars

Source	Region/State/Country	Cost per metric ton	
		1980 dollars	1984 dollars
Caballero-Villar (3)	Valencia, Spain	N/A	96
California Cooperative Extension (6)	San Joaquin Valley, California	143	176
Commission of the European Communities (5)	La Mancha, Spain	178	N/A
	Languedoc, France	188	132
	Apulia, Italy	216	181
Facchini (7)	Emilia Romagna, Italy	243	283
White (12)	Finger Lakes, New York	300	350

N/A = Not available.

Sources: See references for complete citations.

Table 2. Estimated average costs to produce table wine in bottles, per nine-liter case, 1986

Item	California	France	Italy
Dollars per case			
Cost of grapes	1.72	2.00	1.40
Crushing and fermenting	.56	.49	.70
Finishing	7.70	6.88	6.00
Total	9.98	9.37	8.10

Source: (8).

References

- (1) Blandford, D. and G.B. White, "The Outlook for U.S. Wine Imports," *Fruit Situation and Outlook Report*, Economic Research Service, U.S. Department of Agriculture, Washington, D.C., March 1987, 24-31 pp.
- (2) Boulet, D. Personal interview by the authors, May 20, 1986, Montpellier, France.
- (3) Caballero-Villar, P., El Sector Vitivinicola en la Comunidad Valenciana, Costes de produccion, Precios Y C.E.E.", Departamento de Economia y Sociologia Agrarias del Instituto Valenciano de Investigaciones Agrarias, 1984, 3 pp.
- (4) Commission of the European Communities, *Commission Report to the Council*, COM (86) 482 final, September 1986.
- (5) Commission of the European Communities, *Synthese des Couts de Production Du Vin de Table en Espagne, France, et Italie*, Office des Publications Officielles des Communautés Europeennes, Luxembourg, 1985, 109 pp.
- (6) Cooperative Extension, University of California, "Wine Varieties - Sample Costs for a Mature Vineyard, Cost Analysis Worksheet, 1980," Mimeographed publication of Cooperative Extension, Kearney Agricultural Center, Parlier, California, 2 pp.
- (7) Facchini, Claudio, *Costi di Produzione dell 'uva Da Vino in Emilia-Romagna*, Universita degli Studi Bologna, Facolta Agraria, Istituto di Economia e Politica Agraria, 1983, 168 pp.
- (8) Moulton, Kirby, "Competition in the Wine Industry" in *Competition at Home and Abroad*, Agricultural Issues Center, University of California, Davis, California (forthcoming).
- (9) Niederbacher, Antonio, *Wine in the European Community*, Periodical 2-3/1983, Luxembourg: Office for Official Publications of the European Communities, 18 pp.
- (10) Office International de la Vigne et du Vin (O.I.V.) *Bulletin*, various volumes, 1980-86.
- (11) White, G.B. and D. Blandford, "The Competitive Position of the United States Grape and Wine Industry," forthcoming A.E. Research, Department of Agricultural Economics, Cornell University, Ithaca, New York.
- (12) White G.B., Eastern Grape Growers Increase Yields or Face Extinction", *Vineyard and Winery Management*, September/October 1986, pp. 18-23.
- (13) Wiedert, John, *Ordinary Table Wine Imported From Italy, France, and the Federal Republic of Germany*, Countervailing Duty Petition before the United States International Trade Commission, Heron, Burchette, Ruckert and Rothwell, Washington, D.C., 127 pp. plus appendices.

Table 13.—Production and utilization of specified noncitrus fruit, United States, 1985–87

Commodity and year	Production			Utilization 1/								
	Total	Utilized 2/	Fresh	Processed (fresh equivalent)								
				Canned	Frozen	Brined	Crushed for			Oried	Other 3/	Total processed 2/
							Wine	Juice	Oil			
1,000 short tons												
Apricots:												
1985	131.5	106.3	20.0	61.0	12.0	--	--	--	--	13.0	--	86.4
1986 9/.....	55.2	55.1	10.8	27.0	7.2	--	--	--	--	9.5	--	44.4
1987	115.0	104.8	16.8	53.0	12.2	--	--	--	--	22.3	--	88.1
Bananas:												
1985	4.1	4.1	4.1	--	--	--	--	--	--	--	--	--
1986	4.9	4.9	4.9	--	--	--	--	--	--	--	--	--
1987	5.1	5.1	5.1	--	--	--	--	--	--	--	--	--
Cherries, sweet:												
1985	132.5	126.5	53.0	11.3	--	51.4	--	--	--	--	5/10.8	73.5
1986	137.7	136.8	68.6	7.4	--	50.2	--	--	--	--	5/10.5	68.1
1987	210.8	208.8	104.3	12.2	--	74.5	--	--	--	--	5/17.8	104.5
Cherries, tart:												
1985	143.1	140.1	3.8	30.5	103.4	--	--	--	--	--	2.5	136.3
1986	112.1	109.2	2.8	22.0	79.8	--	--	--	--	--	4.8	106.5
1987	179.3	142.8	4.5	35.7	94.1	--	--	--	--	--	8.6	138.3
Dates:												
1985	28.9	28.9	28.9	--	--	--	--	--	--	--	--	--
1986	19.3	19.3	19.3	--	--	--	--	--	--	--	--	--
1987	18.1	18.1	18.1	--	--	--	--	--	--	--	--	--
Figs:												
1985	32.6	32.6	1.4	--	--	--	--	--	--	31.2	--	31.2
1986	48.8	48.8	1.4	--	--	--	--	--	--	47.4	--	47.4
1987	43.4	43.4	1.7	--	--	--	--	--	--	41.7	--	41.7
Grapes:												
1985	5,606.7	5,606.6	781.1	45.0	--	--	2,919.3	295.5	--	1,565.7	--	4,825.5
1986	5,225.9	5,225.3	779.4	40.0	--	--	2,907.5	309.9	--	1,188.5	--	4,445.9
1987	5,204.3	5,190.8	716.6	40.0	--	--	2,589.6	407.9	--	1,437.0	--	4,474.1
Kiwifruit:												
1985	22.0	20.5	20.5	--	--	--	--	--	--	--	--	--
1986	24.3	23.4	23.4	--	--	--	--	--	--	--	--	--
1987	28.0	26.6	26.6	--	--	--	--	--	--	--	--	--
Nectarines:												
1985	210.0	210.0	208.0	--	--	--	--	--	--	--	--	2.0
1986	172.0	172.0	170.0	--	--	--	--	--	--	--	--	2.0
1987	191.0	191.0	190.5	--	--	--	--	--	--	--	--	.5
Olives:												
1985	96.0	96.0	.5	6/76.1	--	--	--	--	5.8	--	7/13.6	95.5
1986	111.5	111.5	.5	6/85.0	--	--	--	--	6.0	--	7/20.0	111.0
1987	67.0	67.0	.5	6/55.0	--	--	--	--	2.5	--	7/9.0	66.5
Papayas:												
1985	30.2	30.2	24.6	--	--	--	--	--	--	--	--	5.6
1986	30.5	30.5	25.1	--	--	--	--	--	--	--	--	5.5
1987	33.0	33.0	27.5	--	--	--	--	--	--	--	--	5.5
Peaches:												
1985	1,073.7	1,023.2	462.4	491.3	46.7	--	--	--	--	16.3	6.6	560.8
1986	1,164.2	1,120.0	556.4	463.5	68.2	--	--	--	--	16.3	15.7	563.6
1987	1,214.4	1,150.6	562.2	464.9	72.2	--	--	--	--	17.5	33.9	588.5
Pears:												
1985	747.2	747.0	349.7	8/388.8	--	--	--	--	--	8.5	--	397.3
1986	766.4	760.4	375.4	8/372.8	--	--	--	--	--	12.1	--	384.9
1987	931.3	928.6	454.9	8/462.6	--	--	--	--	--	11.2	--	473.8
Pineapples:												
1985	565.0	565.0	124.0	--	--	--	--	--	--	--	--	441.0
1986	646.0	646.0	132.0	--	--	--	--	--	--	--	--	514.0
1987	692.0	692.0	134.0	--	--	--	--	--	--	--	--	558.0
California plums:												
1985	166.5	166.5	--	--	--	--	--	--	--	--	--	--
1986	152.0	152.0	--	--	--	--	--	--	--	--	--	--
1987	245.0	245.0	--	--	--	--	--	--	--	--	--	--
California prunes:												
1985	430.0	430.0	--	--	--	--	--	--	--	430.0	--	430.0
1986	291.1	291.1	--	--	--	--	--	--	--	291.1	--	291.1
1987	685.4	685.4	--	--	--	--	--	--	--	685.4	--	685.4
Other prunes & plums 4/:												
1985	51.7	48.1	21.7	14.4	1.3	--	--	--	--	10.7	--	26.4
1986	48.1	44.1	20.4	13.2	1.3	--	--	--	--	9.2	--	23.7
1987	53.5	49.2	23.6	12.2	1.3	--	--	--	--	12.1	--	25.6
Strawberries:												
1985	509.4	509.4	377.1	--	--	--	--	--	--	--	--	132.4
1986	509.7	509.7	367.4	--	--	--	--	--	--	--	--	142.3
1987	555.9	555.9	387.6	--	--	--	--	--	--	--	--	168.3

1/ For all items except bananas and California apricots, dates, plums, and prunes, some quantities canned, frozen, or otherwise processed are included in other utilization categories to avoid disclosure of individual operations. 2/ Some totals do not add due to rounding. 3/ Tart cherries, juice, wine, and brined; sweet cherries, frozen, juice, etc.; and olives, chopped, minced, brined, and other cures. 4/ Michigan, Idaho, Oregon, and Washington. 5/ Frozen juices. 6/ Includes chopped, sliced, and other cures. 7/ Limited and undersized. 8/ Mostly canned, includes small quantities dried; other, excluding California dried pears, uses not published by States to avoid disclosure of individual operations. 9/ Missing data not published to avoid disclosure of individual operations, but included in total.

SOURCES: Noncitrus Fruits and Nuts Annual and Vegetables, NASS, USOA.

Table 14.--Fruit and edible tree nuts: Utilized production, 1986 and 1987

Commodity	Unit	1986			1987 1/		
		Fresh	Processed	All	Fresh	Processed	All
NONCITRUS:							
Apples, commercial	Mil lbs.	4,533	3,374	7,907	(5)	(5)	9,628
Apricots, 3 States	Tons	10,750	44,350	55,100	16,750	88,050	104,800
Avocados 2/	Tons	300,700	(8)	300,700	(5)	(8)	(5)
Avocados, California 2/	Tons	276,000	(8)	276,000	(5)	(8)	(5)
Bananas, Hawaii	1,000 lbs.	9,700	--	9,700	10,100	--	10,100
Cherries, sweet	Tons	68,620	68,140	136,760	104,330	104,490	208,828
Cherries, tart	Mil.lbs.	6	213	218	9	277	286
Cranberries	Bbls.	337,200	3,157,400	3,640,000	(6)	(6)	3,258,000
Dates, California	Tons	19,300	(8)	19,300	18,100	(8)	18,100
Figs, California	Tons	1,400	47,400	48,800	1,700	41,700	43,400
Grapes	1,000 tons	779	4,446	5,225	717	4,474	5,191
Grapes, California	1,000 tons	746	4,024	4,770	685	3,915	4,600
Kiwifruit, California	Tons	23,400	(8)	23,400	26,600	(8)	26,600
Nectarines, California	Tons	170,000	2,000	172,000	190,500	500	191,000
Olives, California	Tons	500	111,000	111,500	500	66,500	67,000
Papayas, Hawaii	1,000 lbs.	50,100	10,900	61,000	55,000	11,000	66,000
Peaches	Mil.lbs.	1,113	1,127	2,240	1,124	1,177	2,301
Pears	Tons	375,420	7,384,930	760,350	454,850	7,473,750	928,600
Pineapples, Hawaii	Tons	132,000	514,000	646,000	134,000	558,000	692,000
Plums, California	Tons	152,000	(8)	152,000	245,000	(8)	245,000
Pomegranates, California	Tons	(8)	(8)	19,400	(8)	(8)	18,000
Prunes, California	Tons	--	99,000	99,000	--	230,000	230,000
Prunes and plums, other States	Tons	20,400	23,700	44,100	23,600	25,600	49,200
Strawberries	Mil.lbs.	735	284	1,019	775	337	1,112
CITRUS: 3/							
Oranges	1,000 boxes	54,710	121,000	175,710	54,400	127,825	182,225
Tangerines	1,000 boxes	2,538	1,112	3,650	3,011	1,219	4,230
Grapefruit	1,000 boxes	27,060	30,410	57,470	29,883	33,142	63,025
Lemons	1,000 boxes	11,480	6,870	18,350	12,345	16,255	28,600
Limes	1,000 boxes	880	845	1,725	850	600	1,450
Tangelos	1,000 boxes	1,338	1,612	2,950	1,310	2,690	4,000
Templets	1,000 boxes	913	2,037	2,950	1,053	2,347	3,400
TREE NUTS:							
Almonds, California 4/	1,000 lbs.	--	--	250,000	--	--	630,000
Filberts, 2 States	1,000 lbs.	--	--	15,100	--	--	21,500
Macadamia nuts, Hawaii	1,000 lbs.	--	--	44,000	--	--	45,000
Pistachios	1,000 lbs.	--	--	74,900	--	--	33,100
Pecans, all	1,000 lbs.	--	--	272,700	--	--	254,600
Improved	1,000 lbs.	--	--	182,650	--	--	171,700
Native and seedling	1,000 lbs.	--	--	90,050	--	--	82,900
Walnuts, 2 States	Tons	--	--	180,000	--	--	245,000

1/ Preliminary. 2/ 1986 indicated 1986/87. 3/ 1986 indicated 1985/86. 4/ Shelled basis. 5/ Data available July 11, 1988. 6/ Data available August 23, 1988. 7/ Processed mostly canned but includes small quantities of dried and other uses. 8/ Missing data not published to avoid disclosure of individual operations.

SOURCES: Noncitrus Fruits and Nuts Annual, Citrus Annual, and Vegetables, NASS, USDA.

Table 15.--Fruit and edible tree nuts: Season-average prices per unit received by growers, 1986 and 1987

Commodity	Unit	1986			1987 1/		
		Fresh	Processed	All	Fresh	Processed	All
Dollars							
NONCITRUS: 2/							
Apples, commercial	Lb.	0.191	6/116.00	0.134	(7)	(7)	0.095
Apricots, 3 States	Ton	950.00	270.00	402.00	646.00	292.00	349.00
Avocados 3/	Ton	338.00	--	338.00	(7)	--	(7)
Avocados, California 3/	Ton	331.00	--	331.00	(7)	--	(7)
Bananas, Hawaii	Lb.	.300	--	.300	.296	--	.296
Cherries, sweet	Ton	1,090.00	553.00	825.00	951.00	537.00	743.00
Cherries, tart	Lb.	.323	.200	.203	.229	.056	.061
Cranberries	Bbl.	--	--	51.80	--	--	(8)
Dates, California	Ton	811.00	--	811.00	776.00	--	776.00
Figs, California	Ton	(10)	(10)	282.00	(7)	(7)	(7)
Grapes	Ton	463.00	183.00	224.00	532.00	203.00	249.00
Grapes, California	Ton	442.00	180.00	221.00	516.00	200.00	247.00
Kiwifruit, California	Ton	1,030.00	--	1,030.00	770.00	--	770.00
Nectarines, California	Ton	445.00	35.00	440.00	344.00	26.00	343.00
Olives, California	Ton	500.00	590.00	590.00	500.00	480.00	480.00
Papayas, Hawaii	Lb.	.217	.023	.182	.193	.020	.164
Peaches	Lb.	.199	6/188.00	.146	.185	6/201.00	.142
Pears	Ton	369.00	9/168.00	267.00	217.00	9/173.00	194.00
Pineapples, Hawaii	Ton	405.00	90.00	154.00	362.00	91.00	143.00
Plums, California	Ton	(10)	(10)	657.00	(10)	(10)	308.00
Pomegranates, California	Ton	(10)	(10)	395.00	(10)	(10)	(7)
Prunes, California	Ton	--	819.00	819.00	--	(7)	(7)
Prunes and plums, other States	Ton	432.00	111.00	260.00	175.00	113.00	143.00
Strawberries	Lb.	.576	.284	.494	.585	.285	.494
CITRUS: 4/							
Oranges	Box	8.14	5.41	6.18	9.34	6.01	6.92
Tangerines	Box	18.46	2.57	13.24	16.73	3.62	12.72
Grapefruit	Box	7.41	4.58	5.88	7.89	5.43	6.58
Lemons	Box	18.17	1.55	11.95	12.56	1.66	6.37
Limes	Box	21.70	3.32	12.70	20.70	3.29	13.50
Tangelos	Box	8.80	4.57	6.49	8.10	5.08	6.07
Temples	Box	8.30	4.16	5.44	7.40	5.21	5.89
TREE NUTS:							
Almonds, California 5/	Lb.	--	--	1.920	--	--	1.050
Filberts, 2 States	Ton	--	--	726.00	--	--	880.00
Macadamia nuts, Hawaii	Lb.	--	--	.800	--	--	.780
Pistachios	Lb.	--	--	1.060	--	--	1.340
Pecans, all	Lb.	--	--	.720	--	--	.565
Improved	Lb.	--	--	.793	--	--	.658
Native and seedling	Lb.	--	--	.573	--	--	.372
Walnuts, 2 States	Ton	--	--	1,080.00	--	--	(7)

1/ Preliminary. 2/ Fresh fruit prices are equivalent returns at packinghouse door for Washington and Oregon, equivalent first delivery point returns for California, and prices as sold for other States. Processing fruit prices for all States are equivalent returns at processing plant door. 3/ 1986, indicated 1986/87. 4/ Equivalent packinghouse door 1986, indicated 1985/86. 5/ Shelled basis. 6/ Dollars per ton. 7/ Data available July 11, 1988. 8/ Data not available. 9/ Processed mostly canned but includes small quantities of dried and other uses. 10/ Missing data not published to avoid disclosure of individual operations.

SOURCES: Noncitrus Fruits and Nuts Annual, Agricultural Prices, and Vegetables, NASS, USDA.

Table 16.--Fruit for processing: Season-average price per ton received by growers for selected noncitrus fruit, by type of use, principal States, 1985-87 1/

Fruit, use, and States	1985	1986	1987	Fruit, use, and States	1985	1986	1987
		Dollars				Dollars	
Apricots:				Grapes--			
Canning:				California (Cont'd):			
California	215.00	263.00	286.00	Dried (fresh basis)	134.00	172.00	(3)
Freezing:				Wine	159.00	183.00	196.00
California	191.00	307.00	291.00	Peaches, clingstone:			
Drying:				Canning:			
California (fresh basis) ..	235.00	271.00	310.00	California	221.00	197.00	216.00
Cherries, tart:				Peaches, freestone:			
Processing, all				Canning:			
New York	504.00	452.00	132.00	Pennsylvania	232.00	--	--
Pennsylvania	480.00	460.00	178.00	California	172.00	177.00	176.00
Michigan	434.00	394.00	106.00	Freezing:			
Wisconsin	388.00	402.00	88.00	California	149.00	165.00	178.00
Cherries, sweet:				Drying:			
Processing, all				California (fresh basis)	104.00	96.00	101.00
Oregon	579.00	606.00	593.00				
Michigan	473.00	520.00	500.00	Pears, Bartlett:			
Washington	506.00	498.00	506.00	Canning:			
Canning:				Washington	187.00	162.00	190.00
Washington	714.00	575.00	667.00	California	232.00	190.00	182.00
Oregon	742.00	580.00	740.00	Drying:			
Michigan	474.00	590.00	500.00	California (fresh basis)	136.00	105.00	106.00
Brining:				Prunes and plums:			
Washington	534.00	471.00	531.00	Canning:			
Michigan	478.00	496.00	500.00	Michigan	241.00	115.00	83.00
Oregon	550.00	612.00	580.00				
Figs--California				Prunes:			
All processing	283.00	(4)	(4)	Drying (fresh basis)			
Grapes--California 2/				California	223.00	279.00	(3)
All processing	151.00	180.00	200.00				

1/ Prices are basis bulk fruit at first delivery point for all California fruits except prunes and pears for drying and processed grapes. Prices for California prunes and pears for drying and grapes and for fruits in other States are equivalent processing plant door returns. 2/ All grape varieties used for processing and wine; raisin varieties for dried (fresh basis). 3/ To be published July 11, 1988. 4/ Missing data not published to avoid disclosure of individual operations.

SOURCE: Noncitrus Fruits and Nuts Annual, NASS, USDA.

Table 17.--Fresh fruit: Consumer price indexes, United States, by months, 1986-88

Item and year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
(1982-1984=100)												
Apples:												
1986	115.7	120.5	120.9	122.8	129.9	139.9	146.0	168.0	151.9	119.3	115.5	116.9
1987	123.7	125.8	135.6	136.1	139.0	151.1	158.6	151.3	129.5	113.6	103.5	103.6
1988	109.3											
Bananas:												
1986	92.3	103.1	110.4	125.8	125.9	101.6	101.0	100.1	104.6	102.3	101.3	91.8
1987	100.8	107.2	107.0	108.2	101.6	111.7	100.0	104.8	103.8	100.2	97.4	107.4
1988	107.2											
Oranges:												
1986	103.8	100.3	98.5	101.2	105.5	110.0	114.5	115.2	112.3	115.7	115.4	110.4
1987	114.1	111.2	114.1	112.6	120.0	141.4	152.8	156.8	160.3	166.8	154.8	126.3
1988	122.3											

SOURCE: Bureau of Labor Statistics, U.S. Department of Labor.

Table 18.--Frozen concentrated citrus juices: Stocks, packs, supplies, and movements, Florida, 1984/85-1987/88

Item and season	Carryin	Pack	Total supply	Total season movements	Carryout
Million gallons 1/					
Orange:					
1984/85	54.4	209.6	264.0	215.7	48.3
1985/86	48.3	215.1	263.4	226.4	37.0
1986/87	37.0	227.9	264.9	225.3	39.6
1987/88	39.6				
Grapefruit:					
1984/85	4.0	25.3	29.3	26.0	3.4
1985/86	3.4	26.2	29.6	26.2	3.4
1986/87	3.4	30.2	33.6	28.4	5.2
1987/88	5.2				
Tangerine:					
1984/85	.3	.8	1.1	.5	.6
1985/86	.6	1.0	1.6	1.3	.3
1986/87	.3	.5	.8	.7	.1
1987/88	.1				

1/ Oranges and tangerines - 42 degree Brix and Grapefruit - 40 degree Brix.

SOURCE: Florida Citrus Processors Association.

Table 19. Selected fresh citrus prices, f.o.b., packed fresh, by months, 1986-88

Item and year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Dollars per box												
ORANGES:												
Florida												
1986	11.30	11.10	10.50	10.10	10.00	13.50	-	-	-	-	13.40	13.30
1987	11.70	11.40	12.20	12.40	12.70	16.60	-	-	-	-	14.80	14.00
1988	12.80	14.10										
Arizona												
1986	13.60	12.90	13.60	13.10	12.20	10.80	8.46	-	-	18.00	16.80	14.30
1987	12.30	11.10	11.80	12.00	13.20	11.90	12.20	-	-	-	27.70	16.70
1988	15.60	12.70										
California												
1986	15.10	13.70	13.80	12.90	13.10	12.10	13.30	14.60	14.00	14.30	13.90	13.70
1987	13.20	14.90	15.00	15.80	14.30	16.80	17.10	15.60	14.80	17.00	24.30	15.10
1988	14.70	13.90										
GRAPEFRUIT:												
Florida												
1986	10.90	11.20	11.80	12.20	12.80	-	-	-	-	-	15.20	12.00
1987	12.10	11.70	11.50	11.90	12.10	13.40	-	-	-	-	14.00	12.70
1988	12.50	12.00										
California												
1986	16.10	14.90	14.70	12.00	14.20	15.50	15.30	15.20	16.00	-	13.40	13.20
1987	12.60	13.00	12.80	12.30	13.80	15.60	15.70	15.50	13.60	14.50	15.50	13.80
1988	10.50	13.50										
LEMONS:												
Arizona												
1986	20.80	16.10	12.80	9.42	20.30	12.80	-	-	15.30	17.00	16.40	16.50
1987	16.70	19.20	19.50	10.90	5.14	-	-	-	-	25.70	23.30	20.60
1988	17.90	16.70										
California												
1986	22.00	18.60	17.70	18.60	18.20	22.90	24.20	18.20	13.90	17.60	18.80	18.40
1987	18.40	19.50	21.10	20.70	20.60	23.70	27.30	28.50	28.80	27.80	24.50	23.70
1988	19.20	16.50										

SOURCE: Agricultural Prices, NASS, USDA.

Table 20. Citrus fruit: Exports of selected fresh items, by areas of destination, United States, 1984/85-1987/88

Item and season 1/	Canada	Europe					Hong Kong	Japan	Other	Total	
		France	Netherlands	Other EC 2/	Other	Total					
Fresh fruit											
Oranges:											
1984/85	125	--	--	9	--	9	113	111	49		407
1985/86	112	--	--	7	1	8	126	109	39		394
1986/87	111	--	--	18	2	20	104	121	40		396
1986/87 thru Dec.	23	--	--	1	--	1	15	8	4		50
1987/88 thru Dec.	18	--	--	--	--	--	5	10	4		37
Grapefruit:											
1984/85	35	32	14	6	1	53	--	103	8		199
1985/86	27	45	20	14	3	82	--	152	9		270
1986/87	28	59	22	20	3	104	--	195	20		347
1986/87 thru Dec.	9	15	9	6	1	31	--	31	4		75
1987/88 thru Dec.	13	16	7	11	1	35	--	38	2		88
Lemons:											
1984/85	12	4	4	2	1	11	6	115	5		149
1985/86	9	--	--	1	1	2	--	111	8		130
1986/87	7	--	--	3	--	3	--	130	11		151
1986/87 thru Dec.	4	--	--	2	--	2	--	53	2		61
1987/88 thru Dec.	3	--	--	1	--	1	--	49	4		57

1/ Season beginning August 1 for lemons, September 1 for grapefruit, and November 1 for oranges. 2/ Belgium-Luxembourg, Denmark, West Germany, Italy, Ireland, Greece, and the United Kingdom.

SOURCE: Foreign Agricultural Service, USDA.

Table 21.--Apples, commercial crop 1/: Total production and season-average prices received by growers, 1985, 1986, and indicated 1987

State and area	Production 2/			Price per pound		
	1985	1986	1987	1985	1986	1987
	Million pounds			Cents		
Eastern States:						
Maine	85.0	88.0	74.0	16.3	19.2	20.0
New Hampshire	56.0	50.0	50.0	18.6	20.0	20.0
Vermont	49.0	49.0	42.0	16.5	17.7	18.2
Massachusetts	89.0	95.0	97.0	18.3	19.6	21.9
Rhode Island	4.0	5.5	5.0	21.8	22.3	23.9
Connecticut	42.0	47.0	45.0	16.6	19.3	21.7
New York	1,090.0	900.0	990.0	7.0	10.1	7.6
New Jersey	105.0	100.0	85.0	11.8	12.4	13.8
Pennsylvania	585.0	620.0	460.0	9.4	8.3	8.4
Delaware	19.0	27.0	30.0	8.7	9.1	8.1
Maryland	80.0	87.0	40.0	10.2	11.3	10.3
Virginia	395.0	460.0	450.0	9.8	9.7	11.0
West Virginia	230.0	230.0	185.0	9.8	10.6	12.0
North Carolina	275.0	120.0	350.0	7.4	8.5	7.9
South Carolina	16.0	30.0	45.0	11.0	13.5	8.8
Georgia	20.0	30.0	50.0	11.2	16.0	12.7
Total	3,140.0	2,938.5	2,998.0			
Central States:						
Ohio	145.0	90.0	150.0	14.4	17.4	15.8
Indiana	75.0	37.0	78.0	13.1	18.6	17.6
Illinois	106.0	90.0	103.0	12.2	16.0	11.6
Michigan	1,100.0	700.0	1,050.0	7.5	9.3	8.6
Wisconsin	62.0	58.0	65.0	14.0	17.1	17.7
Minnesota	23.0	19.0	26.0	22.0	30.5	21.6
Iowa	13.5	5.5	8.8	15.4	26.8	22.1
Missouri	62.0	37.0	53.0	16.2	21.2	13.0
Kansas	15.0	3.0	12.0	11.6	23.9	14.2
Kentucky	17.0	4.0	21.0	14.1	20.8	15.3
Tennessee	11.0	9.0	15.0	13.6	18.5	14.1
Arkansas	16.0	10.0	4.0	11.6	13.3	11.9
Total	1,645.5	1,062.5	1,585.8			
Western States:						
Idaho	131.0	94.0	140.0	19.6	22.2	19.2
Colorado	110.0	18.0	110.0	9.5	9.7	10.2
New Mexico	10.0	6.0	12.6	12.8	19.0	15.5
Utah	57.0	34.0	68.0	12.1	13.8	11.7
Washington	2,050.0	3,160.0	4,200.0	17.0	15.5	8.0
Oregon	160.0	105.0	180.0	12.6	10.6	8.7
California	620.0	515.0	650.0	9.4	16.3	10.7
Total	3,138.0	3,932.0	5,360.6			
United States	7,923.5	7,933.0	9,944.4	11.7	13.4	9.5

1/ In orchards of 100 or more bearing trees. 2/ Includes unharvested production and harvested not sold. In the United States, this was 87.7 million pounds in 1985, 25.7 in 1986, and 316.0 in 1987.

SOURCE: Noncitrus Fruits and Nuts, NASS, USDA.

Table 22. Canned noncitrus fruit: Cannery's stocks, packs, supplies, and shipments, 1985/86-1987/88

Item and season 1/	Carryin	Pack	Total supply	Shipments to Dec. 1	Dec. 1 stocks	Total season shipments	Carryout
1,000 equivalent cases 24 No. 2 1/2's							
Total :							
1985/86	8,709	39,264	47,973	16,558	31,611	34,904	13,069
1986/87	13,069	33,000	46,069	19,740	26,329	38,060	8,009
1987/88	8,009	31,202	45,211	21,784	23,427		
Apricots 2/:							
1985/86	544	1,532	2,076	985	1,091	1,712	364
1986/87	364	505	869	611	258	831	38
1987/88	38	1,281	1,319	712	607		
Fruit cocktail 2/:							
1985/86	1,658	10,058	11,716	4,092	7,573	8,743	2,973
1986/87	2,973	8,976	11,949	4,695	7,254	9,679	2,270
1987/88	2,270	9,386	11,656	5,158	6,498		
Fruits for salad and mixed 2/:							
1985/86	671	2,509	3,180	918	2,149	2,114	1,066
1986/87	1,066	1,845	2,911	1,061	1,850	2,210	701
1987/88	701	2,249	2,950	1,330	1,620		
Peaches, clingstone 2/:							
1985/86	4,191	17,352	21,543	7,411	14,492	15,895	5,648
1986/87	5,648	14,465	20,113	8,470	11,643	16,779	3,334
1987/88	3,334	15,161	18,495	9,807	8,688		
Pears:							
1985/86	1,645	7,813	9,458	3,152	6,306	6,440	3,018
1986/87	3,018	7,209	10,227	4,903	5,324	8,561	1,666
1987/88	1,666	9,125	10,791	4,777	6,014		

1/ Season beginning June 1. 2/ California only.

SOURCES: California League of Food Processors, Northwest Food Processors Associations, and California Cling Peach Advisory Board.

Table 23.--Fresh fruit: Retail price, marketing margin, and grower-packer return, sold in Baltimore, indicated months, 1986-1987

Commodity, production area and month	Retail price	Marketing margin		Grower-packer return 1/ (f.o.b. shipping point price)	
		Absolute	Percentage of retail price	Absolute	Percentage of retail price
	Cents			Cents	
Apples, Eastern Delicious, Appalachia: (pound)					
December 1986	45.0	19.0	42	26.0	58
December 1987	48.3	30.3	63	18.0	37
November 1987	56.3	37.9	67	18.4	33
Apples, Red Delicious, Washington State: (pound)					
December 1986	89.0	60.5	68	28.5	32
December 1987	61.0	36.2	59	24.8	41
November 1987	57.0	38.4	67	18.6	33
Grapefruit, Florida: (pound)					
December 1986	32.9	19.6	60	13.3	40
December 1987	43.3	30.0	69	13.3	31
November 1987	46.1	32.6	71	13.5	29
Lemons: California: (pound)					
December 1986	86.2	60.9	71	25.3	29
December 1987	88.2	59.9	68	28.3	32
November 1987	108.3	76.0	70	32.3	30
Oranges, Florida: (pound)					
December 1986	38.3	26.8	70	11.5	30
December 1987	42.8	29.1	68	13.7	32
November 1987	47.5	31.6	67	15.9	33
Oranges, Valencia, California: (pound)					
November 1986	50.4	31.8	63	18.6	37
November 1987	65.0	44.5	68	20.5	32
October 1987	60.7	37.5	62	23.2	38

1/ Adjusted to account for loss incurred during marketing due to waste and spoilage.

SOURCES: Maryland State Department of Agriculture, Baltimore Retail Food Price Report; Agricultural Marketing Service, USDA; Lemon and Valencia Administrative Committees; and the Citrus Administrative Committee.

Table 24. --Fresh fruit: 1987 representative truck rates for selected fruits 1/

Commodity, shipping point, and market	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Dollars per package											
Apples (1tray packed ctn.)												
Washington, Central to:												
Atlanta	2.85	2.93	2.88	2.88	2.88	2.88	2.88	2.92	2.90	2.88	2.88	3.20
Chicago	2.20	2.25	2.15	2.15	2.18	2.10	2.18	2.18	2.10	2.10	2.10	2.30
Dallas	2.30	2.30	2.30	2.30	2.33	2.33	2.33	---	2.30	2.30	2.30	2.38
Denver	---	1.55	1.50	1.55	1.50	1.50	1.50	---	1.55	1.60	1.60	1.60
Los Angeles	1.55	1.60	1.55	1.60	1.55	1.55	1.50	---	1.35	---	1.55	1.55
New York City	3.28	3.30	3.25	3.30	3.30	3.30	3.30	3.30	3.30	3.25	3.25	3.75
New York, Eastern to:												
Atlanta	1.25	1.25	1.25	1.25	1.25	---	---	---	---	1.25	.58	1.25
New York City	.58	.58	.58	.58	.58	---	---	---	---	.58	1.25	.58
W. Virginia, Martinsburg, and Virginia, Winchester to:												
Atlanta	.88	.88	.88	.88	---	---	---	---	---	.88	.88	.95
New York City	.72	.72	.72	.72	---	---	---	---	---	.72	.72	.80
Grapefruit (4/5 bu. ctn.)												
Florida, Central District to:												
Atlanta	.63	.63	.63	.60	.80	.68	---	---	---	---	.63	.58
Chicago	1.23	1.23	1.21	1.215	1.40	1.40	---	---	---	---	1.18	1.28
New York City	1.25	1.25	1.21	1.25	1.40	1.45	---	---	---	---	1.13	1.23
Grapes (23 lb. lug)												
California, Kern District to:												
Atlanta	1.21	1.26	1.21	1.18	1.41	1.88	2.06	1.65	1.41	1.47	1.24	1.26
Chicago	1.12	1.15	1.09	1.21	1.32	1.82	1.94	1.53	1.32	1.26	1.12	1.21
Dallas	.91	.91	.91	.91	.97	1.32	1.41	1.26	1.00	.94	.82	.94
New York City	1.71	1.68	1.62	1.62	1.88	2.59	2.76	2.41	1.79	1.85	1.71	1.71
Citrus (7/10 bu. ctn.)												
California, Southern to:												
Atlanta	2.20	2.00	1.85	1.85	2.20	3.10	3.45	2.90	2.50	2.30	2.20	2.20
Chicago	2.05	1.85	1.85	1.85	2.15	3.00	3.30	2.60	2.20	1.95	1.85	1.90
Dallas	1.70	1.50	1.70	1.75	1.85	2.15	2.30	1.85	1.70	1.65	1.50	1.70
New York City	2.95	2.75	2.65	2.75	3.20	4.25	4.50	4.00	3.20	3.00	2.90	2.90
Oranges (4/5 bu. ctn.)												
Florida, Central District to:												
Atlanta	.68	.68	.59	.68	.83	.73	---	---	---	---	.68	.58
Chicago	1.25	1.25	1.23	1.28	1.42	1.43	---	---	---	---	1.23	1.28
New York City	1.25	1.25	1.23	1.33	1.43	1.45	---	---	---	---	1.23	1.23

1/ Reported from a sample of shippers and/or truck brokers in specified areas for shipments during the first week of each month.

SOURCE: Fruit and Vegetable Truck Rate Report, AMS, USDA.

Table 25.--Monthly average fruit prices received by growers, United States, 1987-88

Commodity and unit	1987												1988	
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.
Apples for fresh use (cts./lb.)	0.182	0.189	0.180	0.191	0.224	0.246	0.255	0.149	0.180	0.143	0.125	0.118	0.115	0.128
Pears for fresh use (\$/ton)	373.00	366.00	363.00	325.00	337.00	368.00	295.00	234.00	239.00	196.00	211.00	147.00	135.00	193.00
Peaches for fresh use (cts./lb.)	--	--	--	--	.243	.217	.141	.148	.194	--	--	--	--	--
Strawberries for fresh use (cts./lb.)	.900	1.18	.717	.456	.500	.550	.557	.540	.681	1.16	1.46	1.30	1.07	1.10
Oranges: (\$/box) 1/														
Fresh use	5.95	6.95	5.59	6.59	7.02	9.84	10.30	8.84	8.04	10.24	12.52	7.46	6.77	6.48
Processing	3.69	4.52	4.18	4.99	5.39	5.39	5.32	5.32	5.32	5.32	3.18	4.56	6.08	6.19
All	4.01	4.83	4.68	5.15	5.62	6.47	6.29	6.18	6.01	7.36	10.23	5.45	6.19	6.24
Grapefruit: (\$/box) 1/														
Fresh use	5.54	5.85	5.21	2.59	3.71	8.75	8.93	8.86	6.96	7.89	7.96	6.90	6.03	5.77
Processing	5.98	4.16	1.36	.80	3.37	.70	5.67	5.66	5.66	5.66	2.93	3.95	4.45	4.85
All	5.80	4.72	2.64	1.85	2.27	4.34	5.58	5.95	5.52	5.07	6.81	5.84	5.34	5.25
Lemons: (\$/box) 1/														
Fresh use	7.64	9.28	10.82	10.18	10.12	13.54	17.14	18.40	18.34	16.92	13.73	12.36	8.53	6.06
Processing	-1.15	-1.14	-1.15	-1.17	-1.18	-1.18	-1.18	-1.08	-1.30	-1.31	-1.31	-1.32	-1.32	-1.31
All	1.68	2.09	2.57	3.09	4.76	8.58	10.76	11.76	11.65	9.13	7.48	4.55	3.16	1.51
Tangerines: (\$/box) 1/														
Fresh use	14.22	12.86	10.01	8.07	10.78	--	--	--	--	--	24.09	17.88	14.00	16.74
Processing	.60	.33	-1.32	-1.32	-1.32	--	--	--	--	--	1.60	1.45	2.04	4.51
All	11.08	8.43	5.92	4.57	7.68	--	--	--	--	--	17.99	13.74	10.84	12.83

1/ Equivalent on-tree returns.

SOURCE: Agricultural Prices, NASS, USDA.

United States
Department of Agriculture
1301 New York Avenue N. W.
Washington, D. C. 20005-4788

OFFICIAL BUSINESS

Penalty for Private Use, \$300

FIRST-CLASS MAIL
POSTAGE & FEES PAID
U.S. Dept. of Agriculture
Permit No. G-145

Moving? To change your address, send this sheet with label intact, showing new address, to EMS Information, Rm. 228, 1301 New York Ave., N.W. Washington, D.C. 20005-4788

LIST OF TABLES

Page Table

- | | |
|----|--|
| 4 | 1. Index of annual and quarterly prices received by growers for fresh and processing fruit, 1986- 88. |
| 4 | 2. Annual and quarterly consumer price indexes for fresh fruit, 1986- 88. |
| 5 | 3. Citrus fruit: Production, 1985/86, 1986/87, and indicated 1987/88. |
| 8 | 4. Oranges used for frozen concentrate, Florida, 1984/85- 1987/88. |
| 11 | 5. Grapefruit used for frozen concentrate, Florida, 1984/85- 1987/88. |
| 13 | 6. Bearing acreage, fruits and tree nuts, United States, 1980- 87. |
| 14 | 7. Apples, fresh cold storage holdings at end of the month 1985- 87. |
| 16 | 8. Fresh banana imports by country or origin, United States, 1984- 87. |
| 18 | 9. Pears: Utilized production by States and Pacific Coast, variety composition, 1985- 87. |
| 19 | 10. Pears, fresh cold storage holdings at end of the month, 1985- 87. |
| 21 | 11. Stocks of frozen fruit: End of January, 1985- 88. |
| 22 | 12. Strawberry imports, United States, 1981- 87. |
| 32 | 13. Production and utilization of specified noncitrus fruit, United States, 1985- 87. |
| 33 | 14. Fruit and edible tree nuts: Utilized production, 1986 and 1987. |
| 34 | 15. Fruit and edible tree nuts: Season-average prices per unit received by growers, 1986 and 1987. |
| 35 | 16. Fruit for processing: Season-average price per ton received by growers for selected noncitrus fruit, by type of use, principal States, 1985- 87. |
| 36 | 17. Fresh fruit: Consumer price indexes, United States, by months, 1986- 88. |
| 36 | 18. Frozen concentrated citrus juices: Stocks, packs, supplies, and movements, Florida, 1984/85- 1987/88. |
| 37 | 19. Selected fresh citrus prices, f.o.b., packed fresh, by months, 1986- 88. |
| 38 | 20. Citrus fruit: Exports of selected fresh items, by areas of destination, United States, 1984/85- 1987/88. |
| 39 | 21. Apples, commercial crop: Total production and season-average prices received by growers, 1985, 1986, and indicated 1987. |
| 40 | 22. Canned noncitrus fruit: Cannery's stocks, packs, supplies, and shipments, 1985/86- 1987/88. |
| 41 | 23. Fresh fruit: Retail price, marketing margin, and grower- packer return, sold in Baltimore, indicated months, 1986- 87 |
| 42 | 24. Fresh fruit: 1987 representative truck rates for selected fruits. |
| 43 | 25. Monthly average price indexes for fruits, United States, 1987- 88. |